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**U.S. MARINE CORPS TECHNICAL MANUAL**

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**CALIBER .38 SPECIAL SMITH AND WESSON  
REVOLVERS MODEL 10, VICTORY SERVICE,  
AND VICTORY OFFICER'S MODEL  
ORGANIZATIONAL AND FIELD MAINTENANCE**



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EUGENE KAPLAN 519-86

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DEPARTMENT OF THE NAVY  
Headquarters, U.S. Marine Corps  
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31 March 1971

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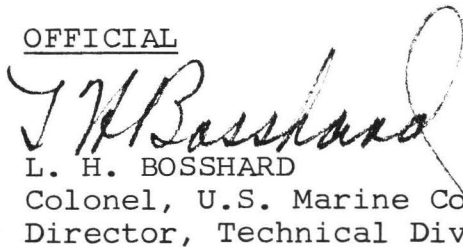
19 MAY 1986

1. This Manual is effective upon receipt and provides guidance and information for maintenance of the Caliber .38 Special Smith and Wesson Revolvers: Model 10, Victory Service Model, and Victory Officer's Model.

2. Notice of discrepancies and suggested changes to this Manual should be forwarded to the Commandant of the Marine Corps (Code CSY).

BY DIRECTION OF THE COMMANDANT OF THE MARINE CORPS

OFFICIAL

  
L. H. BOSSHARD  
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## SAFETY SUMMARY

LISTED BELOW IS EVERY "WARNING" CONTAINED IN THIS MANUAL AND THE PAGE ON WHICH THE "WARNING" IS LOCATED. ALL PERSONNEL INVOLVED IN THE OPERATION AND MAINTENANCE OF THIS EQUIPMENT MUST FULLY UNDERSTAND THE "WARNING" AND THE PROCEDURE BY WHICH THE HAZARD IS TO BE REDUCED OR ELIMINATED. PERSONNEL SHALL BECOME THOROUGHLY FAMILIAR WITH ALL ASPECTS OF SAFETY OF PERSONNEL AND EQUIPMENT PRIOR TO THE OPERATION AND MAINTENANCE OF THE EQUIPMENT.

WARNINGS

1. Assure that each weapon is unloaded prior to inspection (Page 2-6).
2. Avoid having live ammunition in the vicinity of the work area (Page 2-6).
3. Avoid skin contact with carbon removing compounds (Page 3-3).

CAUTIONS

1. Exercise care to ensure that filing or stoning operations are accomplished lightly and evenly. Do not remove more metal from components than is necessary to perform the repair (Page 3-4).
2. Do not attempt to pry the side plate from the frame. Prying action can damage the frame or side piece (Page 4-3).
3. After clearing the stud, relax the spring tension gradually to prevent loss or damage to rebound spring (Page 4-3).

## SAFETY PRECAUTIONS (General)

The following general safety precautions are also applicable. There are many safety rules, but those found below are basic and should be observed rigidly.

1. The gun must always be checked for live ammunition when picked up, drawn from the holster, or handed to or accepted from another individual.
2. The gun should always be holstered except when drawn for a definite purpose.
3. Never point the revolver at anything that you do not intend to shoot.
4. Do not cock the gun unless you intend to shoot it. Do not even insert the finger in the trigger guard until you are ready to fire.
5. Dry-snapping, even with dummy cartridges, should be discouraged unless same is performed on a regular target range or at a known inanimate target object.
6. When the handgun is out of the holster and held in a ready position, be absolutely certain that it is not pointing at any part of yourself or other persons who are in your immediate vicinity.

7. Beware of obstructions in the barrel. If, when firing, a weak or peculiar report is heard, cease firing at once and inspect the barrel for an obstruction. A stuck bullet, or any other object in the barrel, should be removed immediately, since even a plug of mud, snow, twigs, or an abnormal quantity of heavy grease in the bore, may result in a bulged or burst barrel.

8. During the prescribed time intervals, the weapon will be kept trained on the target and all personnel will stand clear of the muzzle.

CHAPTER 1  
INTRODUCTION  
SECTION I  
GENERAL

1-1. SCOPE

a. This manual contains instructions for the information and guidance of personnel responsible for organizational (second echelon) and field (third and fourth echelons) maintenance of the Caliber .38 Special Smith & Wesson Revolvers: Model 10, Victory Service Model, and Victory Officer's Model.

b. The maintenance echelons covered in this manual are:

(1) Organizational (Second Echelon). Maintenance at this level is performed by specially trained personnel in the using organization. Appropriate publications authorize this echelon the necessary tools, spare parts, supplies, test equipment, and skilled personnel to perform maintenance beyond the capabilities and facilities of the operator.

(2) Field

(a) Third Echelon. Maintenance at this level is authorized by appropriate publications to be performed by specially trained units in direct support of using organizations. In special cases, third echelon maintenance may be performed by assigned maintenance units within the using organizations. Third echelon maintenance is authorized a larger assortment of parts, subassemblies, and more precise tools and test equipment than those issued to second echelon. Third echelon maintenance units repair assemblies and subassemblies, and perform repairs for lower echelons within limits imposed by their capabilities in tools, equipment, and spare parts. This echelon may also support lower maintenance echelons by providing technical assistance, mobile repair crews, and repair parts as required.

(b) Fourth Echelon. Maintenance at this level is that maintenance authorized by appropriate publications to be performed by units organized as semifixed or permanent shops. This echelon is authorized a larger assortment of parts, subassemblies, assemblies, precision tools, and test equipment. Mobile repair crews used as support to lower echelons may be furnished by fourth echelon. The principal function of fourth echelon is to repair subassemblies, assemblies, and major items for return to lower echelons and eventual reissue to using units.

c. THE MODEL 10. This revolver is the commercial Smith & Wesson .38 Military and Police Revolver Model No. 10. The Victory Service .38 Caliber Revolver is an earlier production model which was manufactured during World War II. The Victory Officer's Model is a later version of the Victory Service Model and resembles the Model 10 except for minor differences in finish and attachments. All three models of this revolver are functionally the same. The information presented in this manual pertains to all three models, except where indicated.



1-2. FORMS, RECORDS, AND REPORTS

a. GENERAL. The proper execution of the forms, records, and reports associated with the maintenance of these revolvers is the responsibility of the officers in command of the various echelons who are responsible for providing maintenance support for this equipment. The value of accurate records must be appreciated by all personnel involved in compiling, maintaining, and using equipment, materiel, and forms. Records, reports, and forms are used to indicate type, quantity, and condition of materiel undergoing inspection and repair. Proper execution of forms, records, and reports provides a means to identify and initiate actions to rectify malfunctioning and defective equipment; to determine the status of spare parts and authorize replacement of parts; and to establish equipment improvement programs to update materiel being issued to using units.

b. AUTHORIZED FORMS. The forms generally applicable to units maintaining this equipment are prescribed by regulations. In addition to the prescribed forms, maintenance units receiving and processing this equipment may prepare unofficial forms for the purpose of enabling efficient work flows and for monitoring the status of materiel, spare parts, and labor force.

c. FIELD REPORTS OF ACCIDENTS

(1) Injury to personnel or damage to materiel. These reports are required whenever accidents involving injury to personnel or damage to materiel occur. These reports are prescribed by applicable Marine Corps orders.

(2) Ammunition. Whenever an accident or malfunction involving the use of ammunition occurs, firing of the lot which malfunctions will immediately be discontinued. In addition to any applicable reports required by paragraph 1-2c(1), preceding, details of the accident or malfunction will be reported as prescribed in TI-8010-15/1.

d. REPORT OF UNSATISFACTORY EQUIPMENT OR MATERIALS. Any deficiencies detected in the equipment covered herein should be reported immediately in accordance with MCO 4700.1-.

SECTION II

DESCRIPTION AND DATA

1-3. DESCRIPTION

a. ALL MODELS. The Caliber .38 Smith and Wesson Revolvers shown in figures 1-1 and 1-2 are six-shot, breech-loading, hand weapons. These weapons have a solid, one-piece frame; a swing-out cylinder with six chambers; and a hand-actuated extractor for easy unloading. The frame, to which the barrel is mounted, is machined to receive the cylinder assembly, the trigger and hammer assemblies, the bolt, and other internal functional components.

b. The cylinder assembly is mounted on the yoke assembly and swings outward when a thumb-actuated latch is pushed forward. This feature permits the cylinder to be unloaded or reloaded without removal of any component from the weapon. Unloading the weapon is accomplished when the extractor rod, which is positioned in the center of the cylinder, is



Figure 1-1. Model 10 Revolver



Figure 1-2. Victory Revolvers - Service and Officer's Model

pushed to the rear. This action extracts the cartridge cases from the cylinder chambers. The extractor rod is spring-loaded and returns to its normal position when released.

c. These revolvers are exposed-hammer, selective-double-action types; i. e., the weapon may be fired by drawing the hammer back with the thumb to the cocked position and releasing it by pulling the trigger (single action), or by pulling the trigger allowing the hammer to be cocked and released (double action).

d. Built-in mechanical devices are provided to prevent the weapon from firing except by deliberate pull action on the trigger. No manually operated safeties are provided. The sights are fixed, the trigger is serrated, and the hammer thumbpiece and forward portion of the extractor rod are knurled. The stocks may be either checked or smooth.

e. The designation "SMITH & WESSON" is stamped on the left side of the barrel, and ".38 S. & W. SPECIAL CTG." is stamped on the right side of the barrel on each model. The serial number is stamped on the base of the butt frame.

#### 1-4. DIFFERENCES BETWEEN MODELS

##### a. SIGHTS

(1) Model 10. The front sight is a 1/8-inch blade-type sight attached to a serrated ramp. The rear sight consists of a machined notch located on the top of the frame over the cylinder. The sights are nonadjustable.

(2) Victory Service and Officer's Models. The front sight is a 1/12-inch blade sight positioned on the top of the barrel. The rear sight is a machined notch located on the top of the frame over the cylinder. The sights are nonadjustable.

##### b. STOCKS

(1) Model 10. The stock on the Model 10 has a checkered pattern with a Smith & Wesson monogram inserted into the wood near the top. The top of the stock tapers near the thumbpiece level. The bottom of the butt of this revolver may be either square or rounded.

(2) Victory Service Model. The stock on this model has a smooth finish and does not have a Smith & Wesson monogram. The top edge of the stock is rounded and indented into the metal of the butt frame.

(3) Victory Officer's Model. The stock on this model has a checkered pattern with a Smith & Wesson monogram inserted into the wood near the top of the butt piece. The top of the stock tapers near the thumbpiece as in Model 10.

##### c. BUTT SWIVEL

(1) Model 10. None.

(2) Victory Service and Officer's Models. These models may or may not be furnished with a butt swivel.

##### d. ADDITIONAL MARKINGS

(1) Model 10. The designation "U.S." or "U.S. PROPERTY" is stamped into the back of the butt frame. "MADE IN U.S.A. MARCAS REGISTRADAS" and the manufacturer's

name and address are stamped into the metal on the right side of the frame above the trigger guard.

(2) Victory Service Model. A notice of patent rights is stamped into the top of the barrel. "MADE IN U.S.A." is stamped into the right side of the frame above the trigger guard. The weapon's serial number is located on the bottom of the barrel and on the bottom of the butt frame. The number on the butt frame is preceded by the letters "SV".

(3) Victory Officer's Model. "U.S. PROPERTY" is stamped into the back of the butt frame. "MADE IN U.S.A. MARCAS REGISTRADA" and the manufacturer's name and address are stamped on the right side of the frame above the trigger guard. The weapon's serial number is found on the bottom of the barrel, on the bottom of the butt frame, and on the rear of the cylinder. These numbers are preceded by the letter "C".

e. METAL FINISH

(1) Model 10. The metal finish of this weapon is a smooth commercial-grade finish and dark blue in color (derived from a heat-treating bluing process).

(2) Victory Service and Victory Officer's Models. The finish on these revolvers may be either a nonglossy-type sandblast finish or a smooth finish similar to commercial models. If the finish is smooth, the color is a deep blue. The sandblast finish is derived from a Type II, Class B, phosphate process which gives the weapon a dark, greyish-blue color.

f. EXTERNAL PHYSICAL DIFFERENCES

(1) Model 10. The knurled portion of the extractor rod has the same diameter as the rod. There are no screws on the top of the side plate next to the hammer or on the frame forward of the trigger guard as on the other models.

(2) Victory Service Model. The knurled portion of the extractor rod is slightly larger in diameter than the remainder of the rod. The barrel has a machined cutout that permits the knurled feature of the extractor rod to fit in its normal position.

(3) Victory Officer's Model. The knurled portion of the extractor rod is the same diameter as the remainder of the rod. A screw, which retains the side plate, is located on the right side of the frame next to the hammer.

1-5. TABULATED DATA (ALL MODELS, EXCEPT WHERE INDICATED)

Weight .....	30.5 ounces.
Barrel Length .....	4 inches.
Overall Length .....	9-1/4 inches.
Caliber of Bore .....	0.3465-inch.
Rifling:	
Number of Grooves .....	5.
Right-hand Twist .....	18-3/4 inches.
Number of Cylinder Chambers .....	6.
Trigger Pull:	
Single Action .....	3 to 5 pounds.
Double Action .....	14 pounds maximum.
Rear Sight .....	Square Notch.
Front Sight .....	1/8-inch blade (serrated ramp rear portion), fixed.
Front Sight (Victory Model) .....	1/12-inch blade-type fixed.
Ammunition .....	.38 Smith & Wesson Special or Special Mid-Range.
Stock (Victory Service) .....	Wood (walnut), smooth.
Stocks (Model 10 and Victory Officer's Model) .....	Wood (walnut), checked.

CHAPTER 2  
MAINTENANCE INFORMATION

SECTION I

REPAIR PARTS, SPECIAL TOOLS, AND EQUIPMENT

2-1. REPAIR PARTS

Repair parts authorized for performance of organizational and field maintenance are listed in SL-4-00538.

2-2. SPECIAL TOOLS AND EQUIPMENT

Table 2-1 lists the tools and equipment authorized for performing maintenance and repair on these weapons, in accordance with the provisions of this manual.

Table 2-1. Special Tools and Equipment

Item	Use	Figure Reference
BRUSH, Copper	To clean bore and cylinder.	2-1
HANDLE, Cleaning Rod	To hold brush and cleaning swab.	2-1
SCREWDRIVER	To disassemble the weapon.	2-1
SWAB, Cleaning	To clean and oil the bore and cylinder.	2-1
FIXTURE, Trigger Pull Measuring	To check trigger pull.	2-2
GAGE, Cylinder Front Clearance	To check the clearance between the rear of the barrel and the front face of the cylinder.	2-3
GAGE, Cylinder Rear Clearance	To check clearance between the rear face of the cylinder and the rear face of the frame cutout. (Headspace).	2-6
GAGE, Yoke Alinement	To check alinement of yoke assembly.	2-5
GAGE, Hammer Nose Protrusion	To check protrusion of hammer nose through the recoil plate.	2-7
GAGE, Cylinder Alinement	To check alinement of cylinder with barrel.	2-4

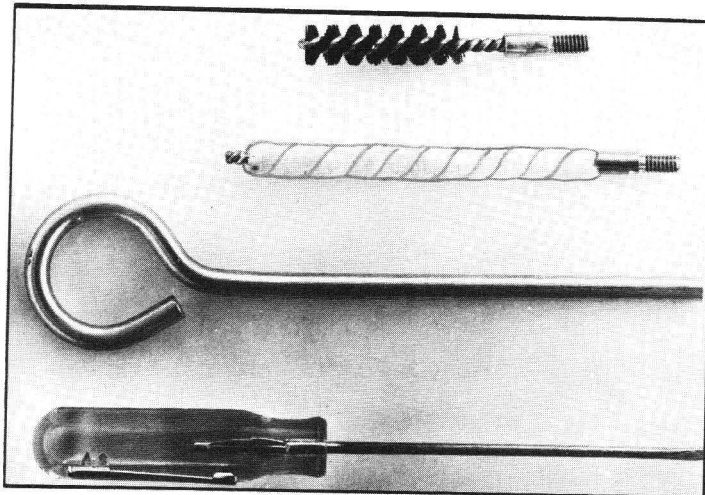


Figure 2-1. Cleaning Equipment for .38 Caliber Revolvers

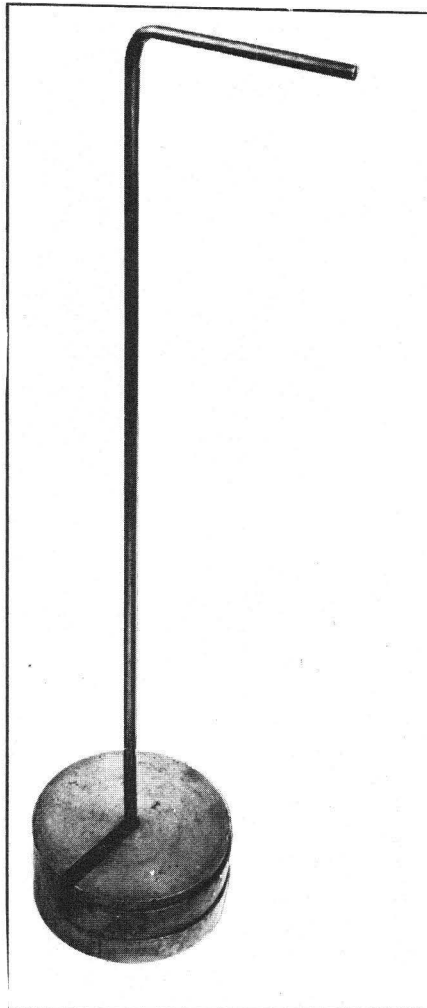


Figure 2-2. Trigger Pull Measuring Fixture

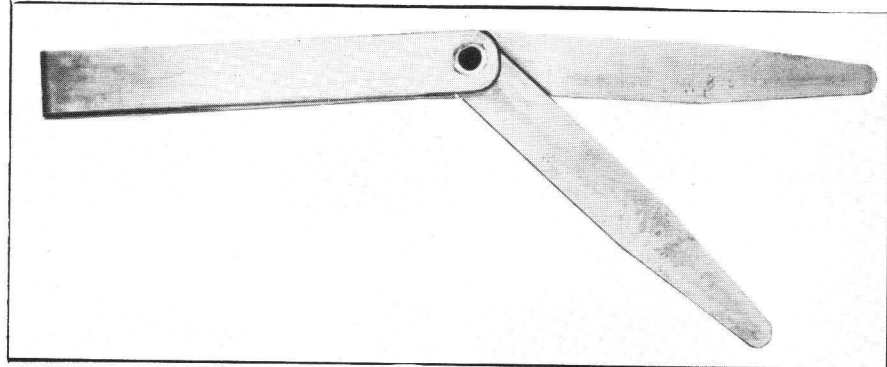


Figure 2-3. Gage, Cylinder Front Clearance

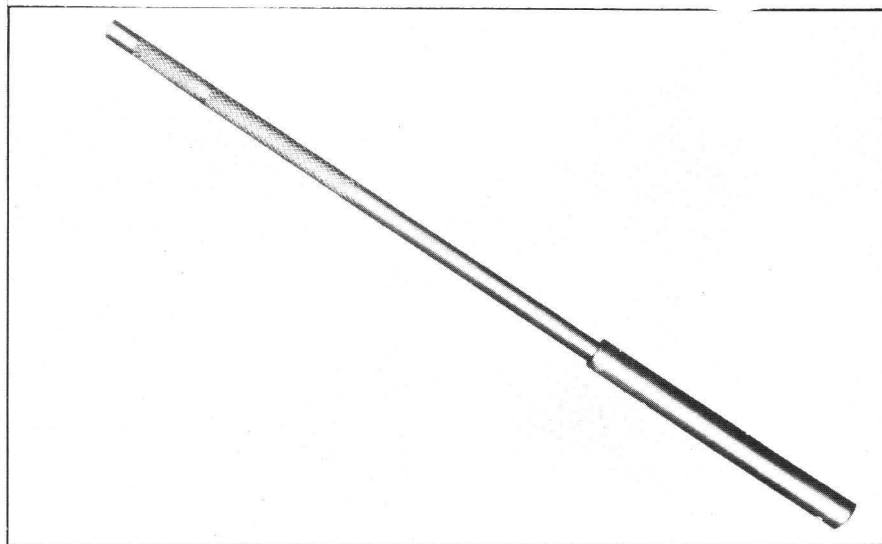


Figure 2-4. Gage, Cylinder Alinement<sup>1</sup>

<sup>1</sup>An engineering drawing of this alinement tool is included in Appendix B.



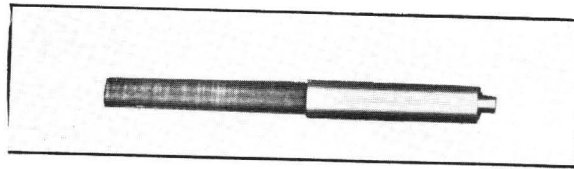


Figure 2-5. Gage, Yoke Alinement<sup>1</sup>

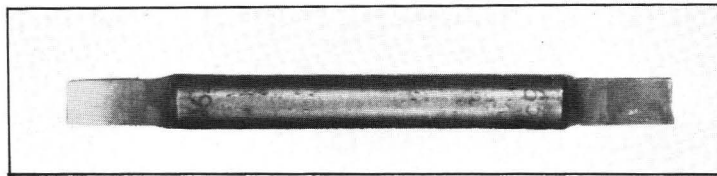


Figure 2-6. Gage, Cylinder Rear Clearance<sup>1</sup>

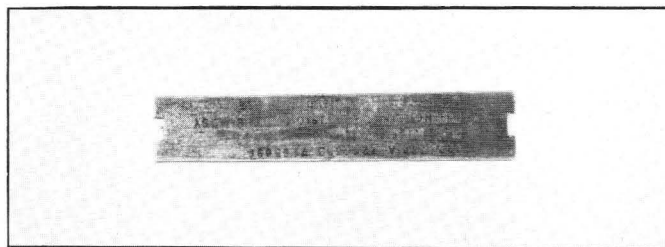


Figure 2-7. Gage, Hammer Nose Protrusion<sup>1</sup>

<sup>1</sup>Engineering drawings of these alinement tools are included in Appendix B.

SECTION II  
TROUBLESHOOTING

2-3. TROUBLESHOOTING

This section provides information for diagnosing and correcting unsatisfactory operation or failure of these weapons and their component parts. Table 2-2 lists malfunctions, probable causes, and corrective actions to be taken on selected malfunctions or failures.

Table 2-2. Troubleshooting

Malfunction/Failure	Probable Cause	Corrective Action
Failure to fire.	Damaged hammer nose. Broken or weak mainspring. Broken (or missing) strain screw. Damaged stirrup.	Replace hammer nose. Replace mainspring. Replace strain screw.  Replace stirrup.
Failure of cylinder to open.	Damaged bolt. Long center pin. Loose extractor rod. Burred locking bolt.	Replace bolt. Repair center pin. Tighten extractor rod. Remove burs.
Failure to extract.	Badly pitted chambers. Damaged extractor rod. Burred extractor. Bent extractor pins.	Replace cylinder. Replace extractor rod. Remove burs. Replace extractor pins.
Failure to cock.	Short center pin. Worn or broken hammer cocking notch. Worn or broken trigger. Worn or broken sear and/or sear spring.	Replace center pin. Replace hammer.  Replace trigger. Replace sear and/or sear spring.
Cylinder fails to close or lock.	Misaligned yoke. Cylinder hits barrel. Cylinder and/or yoke end shake. Loose extractor rod. Weak or broken center pin spring.	Aline yoke. Remove lead buildup. Eliminate end shake of cylinder and/or yoke. Tighten extractor rod. Replace center pin spring.
Cylinder fails to lock at each chamber.	Cylinder stop not fitted properly. Cylinder stop ball sticks below aperture of frame. Worn or broken cylinder stop. Worn or broken cylinder stop spring. Worn or broken hand assembly.	Remove cylinder stop and fit ball to cylinder. Remove cylinder stop and file the level and point. Replace cylinder stop. Replace cylinder stop spring. Replace hand assembly.

Table 2-3. Cleaning and Preserving Materials

Swab, Small Arms Cleaning	1005-288-3565
Brush, Artists: Metal, Ferrule, Flat, Chisel Edges, 7/16 W, 1-1/8 LG, Exposed Bristle	8020-244-0153
Carbon Removing Compound: (P-C-111) (5-gal. pail)	6850-965-2332
Cleaning Compound, Rifle Bore: Small Arms Bore Cleaner, Solution Type (CR) 2-oz. plastic bottle	6850-224-6656
Cleaning Compound, Rifle Bore: Small Arms Bore Cleaner, Solution Type (CR) 6-oz. can	6850-224-6657
Cleaning Compound, Rifle Bore: Small Arms Bore Cleaner, Solution Type (CR) 1-gal. can	6850-224-6663
Cloth, Abrasive: Crocus, Ferric Oxide and Quartz, Jean-Cloth-Backing, Closed Coating, 9 W, 11 LG, 50 SH-/ Sleeve (CA)	5350-221-0872
Dry Cleaning Solvent: (SD) (1-gal. can)	6850-281-1985
Lubricating Oil, Semi-Fluid: MIL-L-46000A (LSA) 2-oz. plastic bottle	9150-935-6597
Lubricating Oil, Semi-Fluid: MIL-L-46000A (LSA) 4-oz. plastic bottle	9150-889-3522
Lubricating Oil, Semi-Fluid: MIL-L-46000A (LSA) 1-qt can	9150-687-4241
Lubricating Oil, Semi-Fluid: MIL-L-4600A (LSA) 1-gal. can	9150-753-4686
Lubricating Oil, Weapons: (LAW) 1-qt. can	9150-292-9689
Rag, Wiping: Cotton (50-lb. bale)	7920-205-1711

## SECTION III

## MAINTENANCE INSPECTIONS

2-4. CATEGORIES OF INSPECTION

a. This section provides instructions for three categories of inspection that are performed by maintenance personnel on materiel either in the hands of troops in the field or in maintenance shops. Inspections are made for the purposes of determining the serviceability of materiel, recognizing conditions that could cause subsequent failure, assuring proper application of maintenance policies at prescribed levels, and determining the ability of a unit to accomplish its maintenance mission.

WARNING

Before starting an inspection, be sure to clear the weapon. Do not actuate the trigger until all chambers of the cylinder have been inspected and cleared. Avoid having live ammunition in the vicinity of the work area.

b. Where appropriate as a normal phase of inspection, troubleshooting information is included. The categories of inspection are described in paragraphs 2-5 through 2-7. Detailed information is given in table 2-4.

2-5. INSPECTION OF MATERIEL ISSUED AND IN USE

a. SPOT CHECK INSPECTION. This inspection is performed periodically on a small percentage of the materiel in the using unit. Its purpose is to determine the adequacy and effectiveness of maintenance and supply. Its scope includes:

(1) Inspection to detect incipient failures before materiel becomes unserviceable.

(2) Inspection for availability and proper use of technical and supply manuals and lubrication instructions.

(3) Inspection for accuracy of records, authorized levels of equipment and supplies, supply economy practices, preservation and safekeeping of tools, availability of repair parts and supplies, and knowledge of proper requisition and requisition followup procedures for materiel.

b. COMMAND MAINTENANCE INSPECTION. This inspection is performed on materiel at least annually. Its purpose is to determine the serviceability of equipment, to predict maintenance and supply requirements, and to determine the adequacy of facilities and effectiveness of maintenance and supply procedures. Information obtained during the inspection should indicate both future requirements for overhaul or replacement and immediate needs for maintenance and modifications. When practical, deficiencies revealed by the inspection are corrected immediately.

2-6. INSPECTION OF MATERIEL SUBMITTED FOR MAINTENANCE

a. INITIAL INSPECTION. This inspection is performed on materiel received from using units upon delivery to ordnance shops. Its purpose is to determine or verify repairs

to be made and to ascertain parts and supplies required. During inspection, a determination is made of authorized modifications to be performed on the materiel.

b. IN-PROCESS INSPECTION. This inspection is performed one or more times during the repair process. Its purpose is to ensure that all parts conform to prescribed standards, that the workmanship is in accordance with approved methods and procedures, and that deficiencies not discovered during the initial inspection are found and corrected.

c. FINAL INSPECTION. This inspection is performed at the end of the repair process to ensure that the materiel is acceptable for return to the using unit or to storage.

d. MAINTENANCE INSPECTIONS. Table 2-4 presents the types of maintenance inspection item and action to be taken.

Table 2-4. Maintenance Inspections<sup>1</sup>

Item	Action	Figure Reference
1. <u>Overall Weapon</u>	Inspect general appearance, condition and operation.	Figure 1-1; 1-2
2. <u>Yoke Cylinder and Extractor Group</u>	<p>a. Visually inspect cylinder and extractor for dents, cracks, and burs that would impair functioning.</p> <p>b. Check cylinder for cleanness and freedom from obstructions, carbon deposits, or corrosion.</p> <p style="text-align: center;">NOTE</p> <p>Uniformly fine pits or fine pits in a densely pitted area are allowable; large pits that could cause extraction problems are not.</p> <p>c. Check alinement of all chambers of the cylinder, using cylinder alinement gage.</p> <p>d. Check yoke alinement, using yoke alinement gage.</p> <p>e. Check cylinder end-shake.</p> <p>f. Check rear clearance of cylinder, using the cylinder rear clearance gage. (Go 0.062; No-Go 0.064.)</p> <p>g. Check front clearance of cylinder, using cylinder gage front clearance. (Allowable clearance 0.003 to 0.006.)</p> <p>h. Inspect extractor for cracks and burs.</p>	<p>Figure 2-4</p> <p>Figure 2-5</p> <p>Figure 2-6</p> <p>Figure 2-3</p>
3. <u>Barrel Assembly</u>	<p>a. Inspect surface for cracks and defects.</p> <p>b. Check bore for cleanness and freedom from obstructions, carbon deposits, or corrosion.</p> <p style="text-align: center;">NOTE</p> <p>Uniformly fine pits or fine pits in a densely pitted area are allowable. Pits up to the width of a land or groove, and 3/8-inch or less long, are allowable.</p>	

<sup>1</sup>All items listed witness maintenance inspection on the following levels: Spot check, Command, Initial, In-process, Final.

Table 2-4. Maintenance Inspection (Continued)

Item	Action	Figure Reference
3. <u>Barrel Assembly</u> (Continued)	<p>c. Check bore for rings and bulges.</p> <p style="text-align: center;">NOTE</p> <p>Definite ringed bores or bores ringed sufficiently to bulge the barrel are cause for rejection.</p> <p>d. Inspect locking bolt housing for cracks or dents that would affect functioning. Small dents or gouges are allowable.</p> <p>e. Check front sight for cracks and general condition.</p>	
4. <u>Trigger Pull</u>	<p>Check trigger pull, using trigger pull fixture. (Single Action: 3 to 5 lbs.) (Double Action: 14 lbs.)</p>	Figure 2-2
5. <u>Stock Assembly</u>	<p>Inspect stock assemblies for cracks, deep gouges, or any defect that may affect serviceability. Replace stocks on which checkering is worn smooth.</p>	Figure 1-1; 1-2
6. <u>Side Plate and Internal Parts</u>	<p>a. Inspect side plate for cracks, deformation, and improper seating. Check for burrs, rough edges, or obstructions in recessed portions which could affect functioning.</p> <p>b. Check all screw and pin holes for out-of-roundness or enlargement. Check the number on the side plate with the number on frame and yoke assembly. Replace the plate if serviceable.</p> <p>c. Check hammer block for burrs or distortion. Check for wear on rebound slide pin hole and hammer locking surface. Replace as required.</p> <p>d. Check all springs for breaks and distortions.</p>	Figure 4-3          Figure 4-2; 4-7

Table 2-4. Maintenance Inspections (Continued)

Item	Action	Figure Reference
<p>6. <u>Side Plate and Internal Parts</u> (Continued)</p>	<p>e. Inspect mainspring for corrosion, cracks, burs, and wear. Inspect the hooks which engage with the stirrup. Smooth all burs with fine paper or stone. Replace if found unserviceable.</p>	<p>Figure 4-4</p>
	<p>f. Inspect hammer group for breakage, corrosion, and wear. Examine for broken, worn, or tight hammer nose and rivet; broken worn or loose sear and stirrup and retaining pins, or defective sear spring. Replace as required.</p>	<p>Figure 4-2</p>
	<p>g. Ensure that hammer nose protrusion is sufficient by using hammer nose protrusion gage. (Minimum protrusion: 0.040; maximum: 0.050.)</p>	<p>Figure 2-7</p>
	<p>h. Inspect hammer nose for smoothness and its well rounded shape. Ensure that the hammer pin hole is not worn or elongated. Check for worn or burred trigger engaging surfaces on hammer and sear. Replace as required.</p>	
	<p>i. Check hammer tang for knurling. Determine if it has sufficient gripping surface for normal cocking action.</p>	
	<p>j. Inspect rebound slide assembly for breakage and wear. Pay special attention to the hammer block, the hammer, and the trigger lever engaging surfaces. Check spring for corrosion or distortion. Replace components as required.</p>	<p>Figure 4-4</p>
	<p>k. Inspect hand assembly and hand spring for breakage, burs, or distortion. Remove small burs with fine abrasive paper or stone. Replace if necessary.</p>	



Table 2-4. Maintenance Inspections (Continued)

Item	Action	Figure Reference
<p>6. <u>Side Plate and Internal Parts</u> (Continued)</p>	<p>1. Inspect trigger and trigger lever for wear, cracks, and breakage. Examine trigger for burs or worn components. Check all pin holes in the assembly for roundness. Replace component parts found unserviceable. If the trigger pull has been found too heavy or too light and correction cannot be made with replacement of component parts, replace the whole assembly.</p> <p>m. Inspect cylinder stop on the cylinder and the trigger engaging surface for breakage, wear, elongation of holes and distortion. Replace components found unserviceable. Check cylinder stop plunger for burs and mutilations (Victory Model only). Check cylinder stop spring. Replace plunger and spring if unserviceable.</p> <p>n. Inspect thumbpiece for breakage, wear on the side plate engaging surfaces, and enlargement of its screw hole. Replace as required.</p> <p>o. Inspect bolt for breaks, stripped threads, rough spots, distortion, or other defects. Check for wear on surfaces engaging hammer. Remove burs with fine abrasive paper or stone. Check bolt plunger and spring for wear and distortion. Replace parts found unserviceable.</p> <p>p. Examine extractor rod locking bolt, locking bolt spring, and locking bolt pin for burs, wear, or distortion. Replace unserviceable parts.</p>	<p>Figure 4-2</p> <p>Figure 4-2</p> <p>Figure 4-4</p>
<p>7. <u>Frame Assembly</u></p>	<p>a. Inspect frame for breaks, twist, and corrosion, especially at the point where the barrel is attached.</p>	<p>Figure 4-3</p>

Table 2-4. Maintenance Inspections (Continued)

Item	Action	Figure Reference
<p>7. <u>Frame Assembly</u> (Continued)</p>	<p>b. Check the condition of pins on which the hammer, the rebound slide, the stock assemblies, and the trigger are installed.</p> <p>c. Examine the area where the barrel is attached for cracks and burred threads on the barrel.</p> <p>d. Inspect the trigger guard for bent condition. Determine if the condition of the guard would interfere with normal function of the weapon.</p> <p>e. Inspect the serial numbers and markings for legibility. Ensure that numbers correspond on the yoke and the side plate.</p> <p>f. Inspect recoil plate for pits. Inspect bolt hole for roundness. Check all screw and pin holes for enlargement and for burred and stripped threads. Check condition of stock pin. Replace pin if found defective.</p> <p style="text-align: center;">NOTE</p> <p>If frame is unserviceable, complete weapon should be coded out as no frame replacement is authorized.</p>	

## CHAPTER 3

## GENERAL MAINTENANCE INSTRUCTIONS

3-1. GENERAL

This chapter provides instructions on general maintenance and repair procedures. The information includes details for disassembly, assembly, replacement of parts, use of tools, cleaning, surface finishing, and lubrication.

3-2. DISASSEMBLY AND ASSEMBLY PROCEDURES

## a. GENERAL

(1) Complete disassembly of the weapon is not always necessary in order to perform required repair or component replacement. To maintain disassembly and assembly operations at a minimum, good judgment should be exercised.

(2) When disassembling a unit, remove the major assemblies. Figure 3-1 shows the major assemblies of this weapon. These consist of the cylinder assembly, yoke assembly, and frame. The cylinder and frame assemblies may be disassembled further for inspection and/or replacement of individual parts. The component parts of these weapons are specifically fitted to each individual weapon and should not be mixed with similar parts from other weapons.

(3) Before beginning assembly of the component parts and major assemblies, all parts should be lightly lubricated with prescribed lubricating oil. During assembly, the reverse order of disassembly is followed.

## b. REPLACEMENT OF PARTS

(1) Unserviceable and unrepairable assemblies should be disassembled and serviceable parts inspected and returned to stock for reissue or use. Parts or assemblies that cannot be repaired or reclaimed are to be replaced.

(2) When assembling a weapon, replace all defective pins, screws, bushings, springs, or other minor components that are malfunctioning.

(3) If a new part is not available, a used part may be substituted. Used parts should be examined carefully to determine their serviceability and suitability. Minor reconditioning may be performed on the part to fit it to the weapon.

## c. USE OF TOOLS

(1) Care should be exercised in the use of tools to prevent damage to both parts and tools. Only those tools suitable and designed for the task should be used.

(2) Special tools provided for use in performing maintenance and inspections of the weapon will be used only for the purpose for which they are intended.

(3) Tools and parts should be maintained in a clean, useable condition. Normal rules of cleanliness and order should be observed.

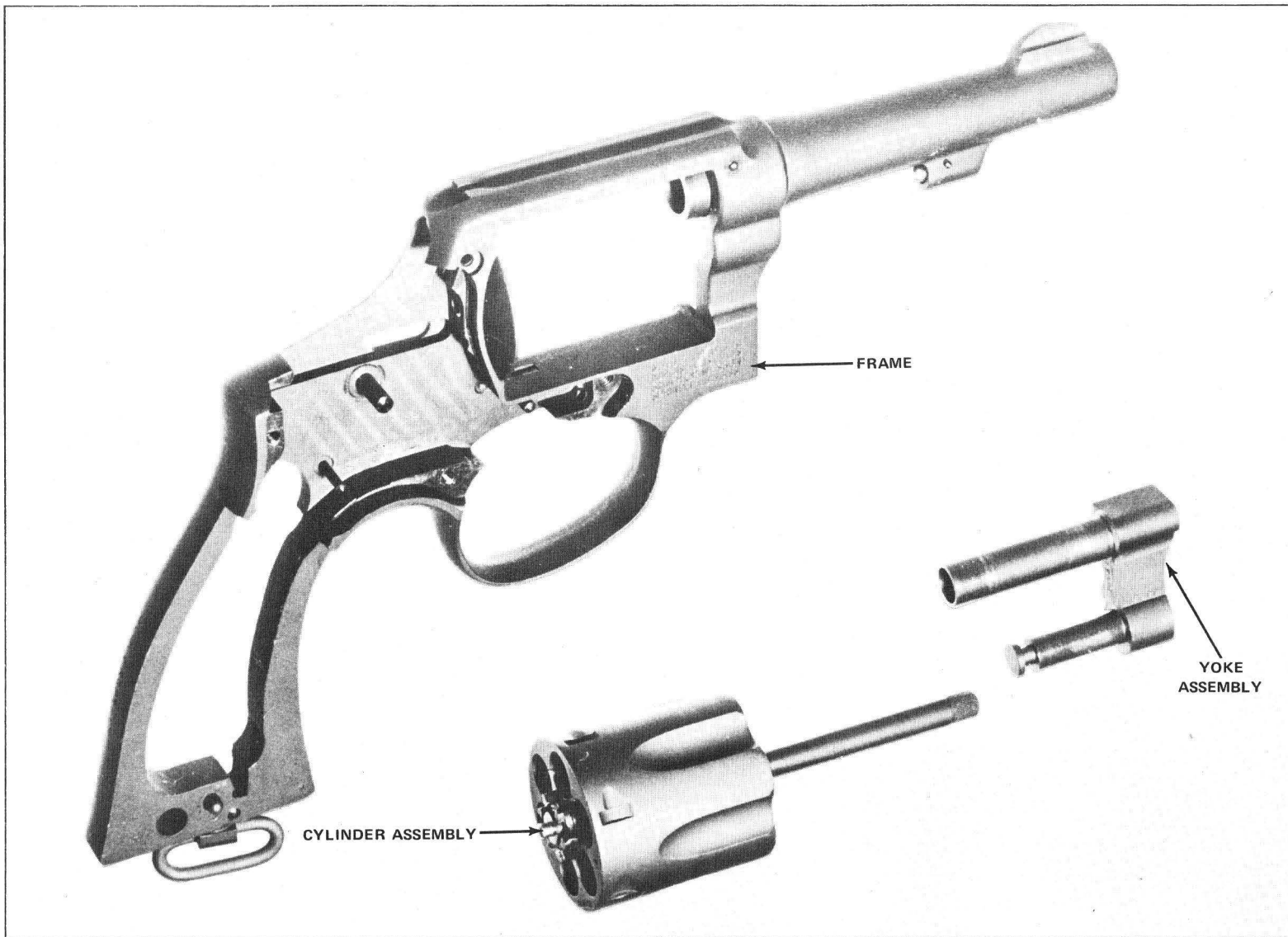


Figure 3-1. Rightside View of Frame and Cylinder Yoke Assemblies

## d. CLEANING

(1) As assemblies are removed and disassembled, component parts are placed in a wire basket and cleaned thoroughly of all grease, oil, water, and dirt. An approved cleaning solvent should be used. Dry all parts thoroughly with clean cloths and lightly oil with approved general purpose lubricating oil. Instruction for lubrication of parts are covered in FM 23-35 and TM 9-273. Lubricating materials are listed in table 2-3.

(2) Using prescribed cleaning solvents, clean the barrel, cylinder chambers, and all other parts that come into contact with powder residues. The caliber .38 cleaning rod, swab, and cleaning bore brush shown in figure 2-1 are used.

(3) Clean the parts bearing a hard carbon residue with carbon removing compound as follows:

WARNING

Avoid skin contact with carbon removing compounds. If contact with the cleaning compound occurs, rinse in water and apply lanolin-base cream. The use of rubber gloves and protective equipment is recommended.

- (a) Partially fill a suitable container with the carbon cleaning compound.
- (b) Clean and dry component parts having carbon residue, as described in paragraph 3-2d, but do not oil. Immerse the parts in the carbon cleaning compound.
- (c) Soak the parts for 2 hours or until all traces of carbon have been removed.
- (d) Remove the parts from the container and rinse in water, kerosene, or drycleaning solvent. To effectively remove the carbon which has not been dissolved, use a stiff bristle brush and scrub the parts under running water.
- (e) Wipe the parts dry with clean cloths and lubricate with light oil.

## NOTE

If accumulations of rust or carbon cannot be removed with a stiff brush, use very fine crocus cloth and light oil. Crocus cloth should be used carefully to prevent scratching external finish or altering the contour of working surfaces.

(4) New materiel and parts received from storage may have a heavy accumulation of grease or other preservative. Before placing these items in service, clean thoroughly, dry, and lubricate.

## e. FINISHED SURFACES

(1) The external finished surfaces and working surfaces of the weapon are to be carefully handled to prevent changes to the weapon's appearance or to the working surfaces of components. The use of steel tools and abrasive materials should be minimized to the

extent necessary to perform a specific task. Babbitt metal blocks can be used to strike surfaces since this metal has a softer consistency and will not mar or deform the finish or internal components.

(2) The use of steel tools should be restricted to those tasks which specifically require peening of components. Refinished parts should be treated to match the appearance and operation of new parts.

f. DEBURING AND SMOOTHING

(1) Polishing and stoning of weapon components may be required for specific repair and maintenance procedures. This operation is usually performed to relieve friction between moving parts and to remove burs caused by use or rough handling. Burs on working interfaces are removed with a fine file or stone and given additional polish by using fine crocus cloth and light oil.

(2) Smooth rough spots caused by scores, galls, gouges, and rust pits to enable all parts to operate normally. The finish of the repair part should closely approximate that of a new part.

CAUTION

Exercise care to ensure that filing or stoning operations are accomplished lightly and evenly. Do not remove more metal from components than is necessary to perform the repair.

(3) Smooth rough areas caused by galls, scores, gouges, and rust to allow all parts to operate normally. The finish of the repaired part should closely approximate that of a new part.

g. LUBRICATION

(1) After all maintenance and repair tasks are completed, make certain that all metal parts are cleaned and dried in accordance with instructions outlined in paragraph 3-2d.

(2) Lubricate all metal parts by applying a light coat of general purpose lubricating oil before reassembly of the weapon. Ensure that all metal interfaces are lubricated sufficiently to reduce friction and allow free movement.

(3) Wipe off excess oil with clean cloths.

CHAPTER 4  
REPAIR INSTRUCTIONS  
SECTION I  
DISASSEMBLY INSTRUCTIONS

4-1. FORWARD SIDE PLATE SCREW, YOKE, AND CYLINDER AND EXTRACTOR GROUP

NOTE

Except as otherwise indicated, the numbers in parentheses refer to the callouts of figure 4-1.

- a. Remove the forward side plate screw (3).
- b. Press forward on thumbpiece (6) to release cylinder and extractor group (7) and push cylinder to the left.
- c. Slide yoke (1) and cylinder forward, alining one of the grooves on the cylinder with the protruding left forward edge of the frame.
- d. On all models except Victory Service, slide yoke forward and separate it from the cylinder and the extractor group.
- e. On the Victory Service Model, unscrew extractor rod (8) from cylinder and extractor group; slide the yoke off; and completely disassemble the extractor (14), extractor spring (12), center pin (10), center pin spring (9), and extractor rod collar (11) from the cylinder (13).

NOTE

The Model 10 extractor rod (8) unscrews counter-clockwise. All other models have conventional threads.

4-2. STOCK ASSEMBLIES, SIDE PLATE, AND INTERNAL COMPONENTS

NOTE

Except as otherwise indicated, the numbers in parentheses refer to the parts called out in figure 4-2, and the letters in parentheses refer to the parts called out in figure 4-3.

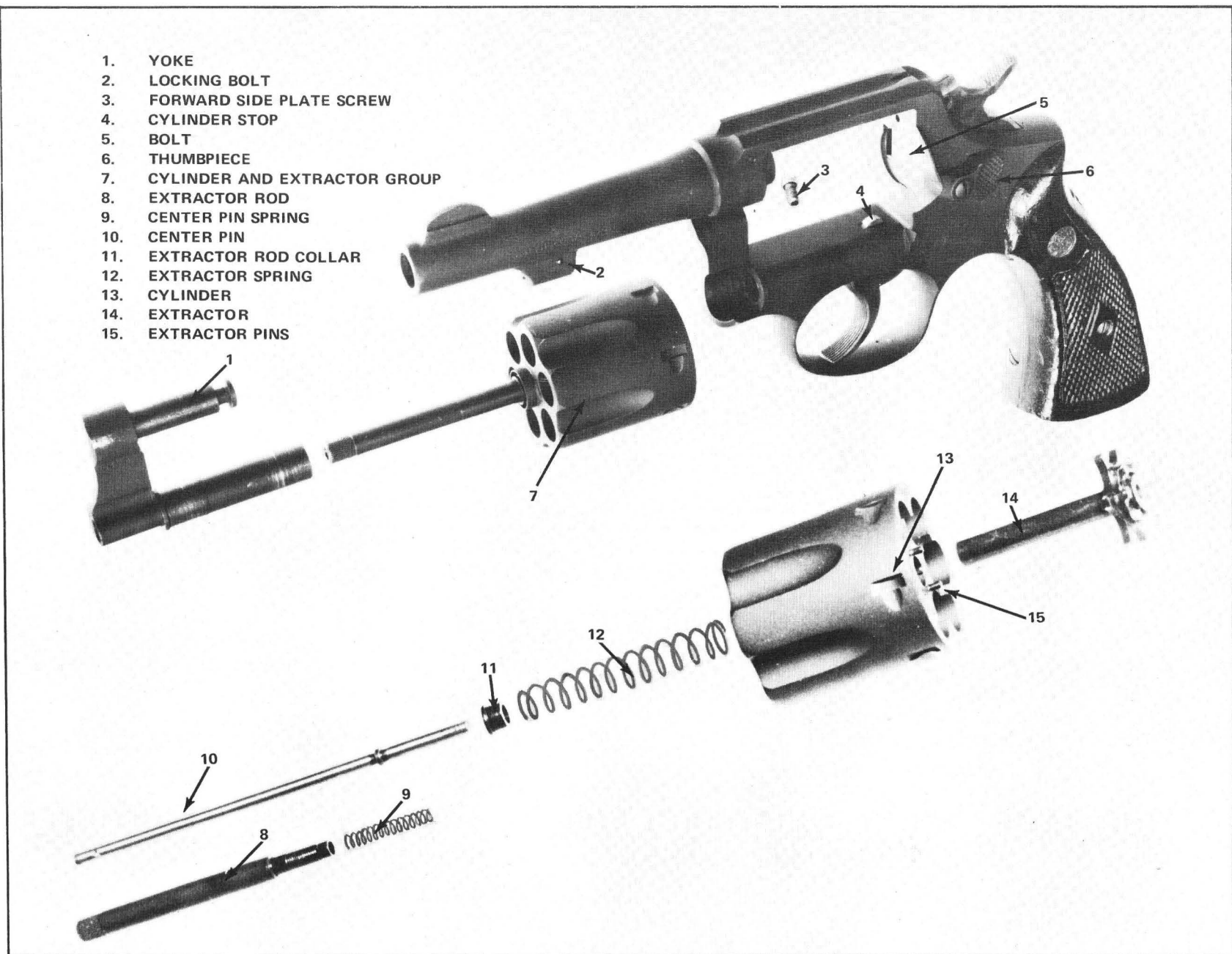


Figure 4-1. Forward Side Plate Screw, Yoke Cylinder and Extractor Group Disassembled From Receiver



- a. Remove stock screw (41) and the left and right stocks (27) and (40).
- b. Remove remaining side plate screws (23), (25), and (26).
- c. Pad the frame surrounding the side plate (24) and gently tap all areas adjacent to the side plate. The side plate should gradually rise from its press-fitted seat in the frame to be lifted out easily.

CAUTION

Do not attempt to pry the side plate from the frame.  
Prying action can damage the frame or side piece.

- d. After removing the side plate, lift the hammer block (22).
- e. Remove the strain screw (39) from the frame.
- f. Push the top end of the mainspring (36) forward to remove the strain from the stirrup (11) and disengage the mainspring from the stirrup lugs. Remove the mainspring.
- g. Pull back on thumbpiece (2) and hold it in the rear position. Pull the hammer group (3) back to the cocked position. Hold the trigger (28) in its rearmost position and lift the hammer group off the hammer stud (B). Release the trigger.
- h. Before attempting to remove the rebound slide (20), carefully lift its rear end away from the frame to clear the rebound slide stud (X) while simultaneously compressing the rebound slide spring (21) to relieve tension against the stud.

CAUTION

After clearing the stud, relax the spring tension  
gradually to prevent loss or damage to the rebound  
spring.

- i. Remove the rebound slide and remove the rebound slide spring from its recess.
- j. Remove the trigger group (28) by holding upper end of hand assembly (29) to the rear to clear the frame. Carefully lift trigger group from the trigger stud (T).
- k. Separate the trigger lever (34) and hand assembly (29) by exerting upward pressure on hand torsion spring (30), or by gently pulling the hand upward away from the trigger.
- l. On both Victory models, remove cylinder stop plunger screw (15), cylinder stop plunger spring (16), and cylinder stop plunger (17). Swing cylinder stop (18) downward so that it clears the aperture (C) in the frame. Swing cylinder stop (18) from its stud. (On the Model 10, the cylinder stop is held by a cylinder stop spring. Carefully lift cylinder stop off cylinder stop stud, exercising care to prevent loss or damage to the cylinder stop spring as the tension is released).
- m. Remove the thumbpiece securing nut (1) and lift off the thumbpiece (2). Press the bolt (19) to the rear; lift rear of the bolt upward and out of the frame. Use care in this procedure to prevent bending or distortion of the bolt or loss or damage to the bolt plunger (38) or bolt plunger spring (37).

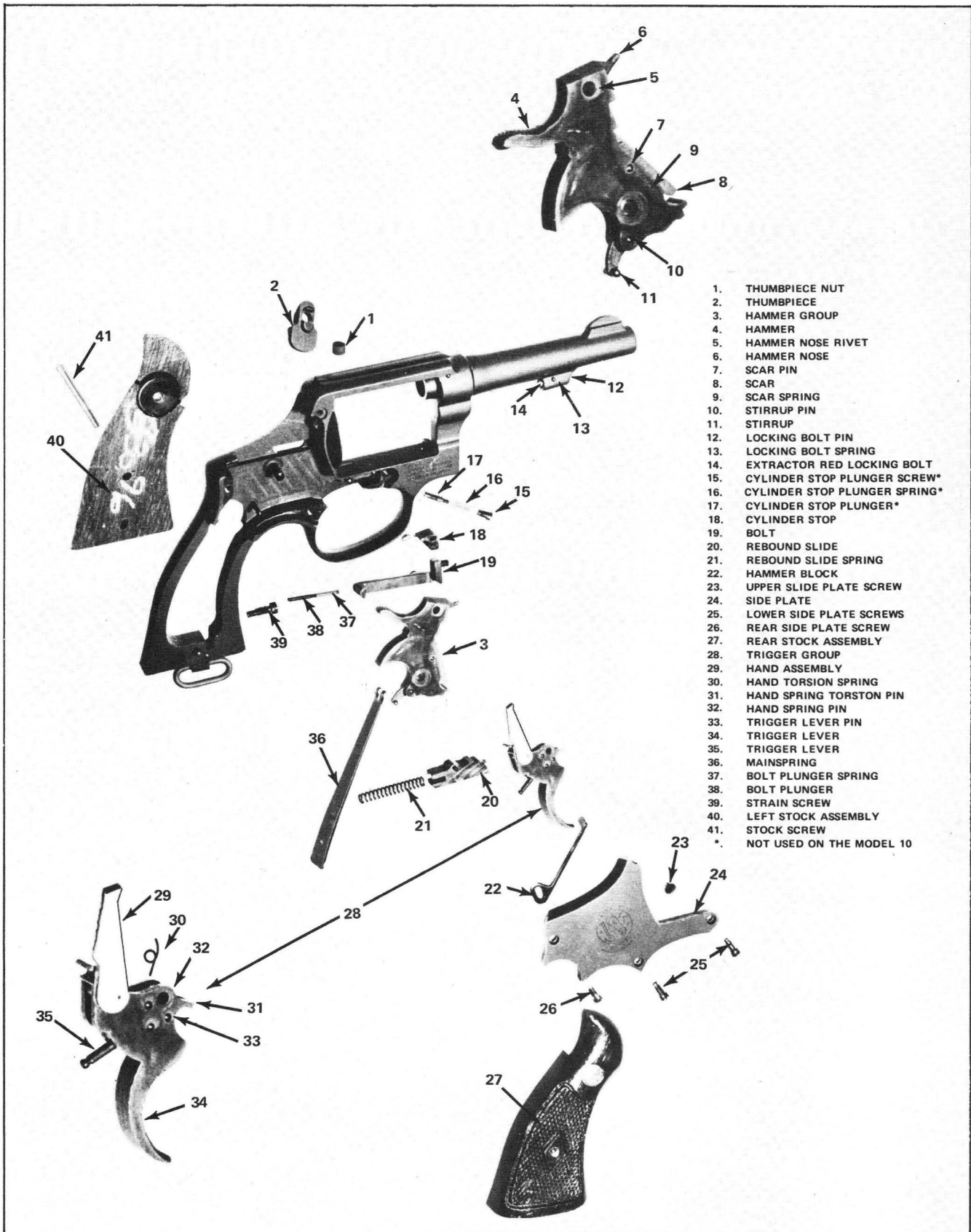


Figure 4-2. Exploded View of Revolver Components

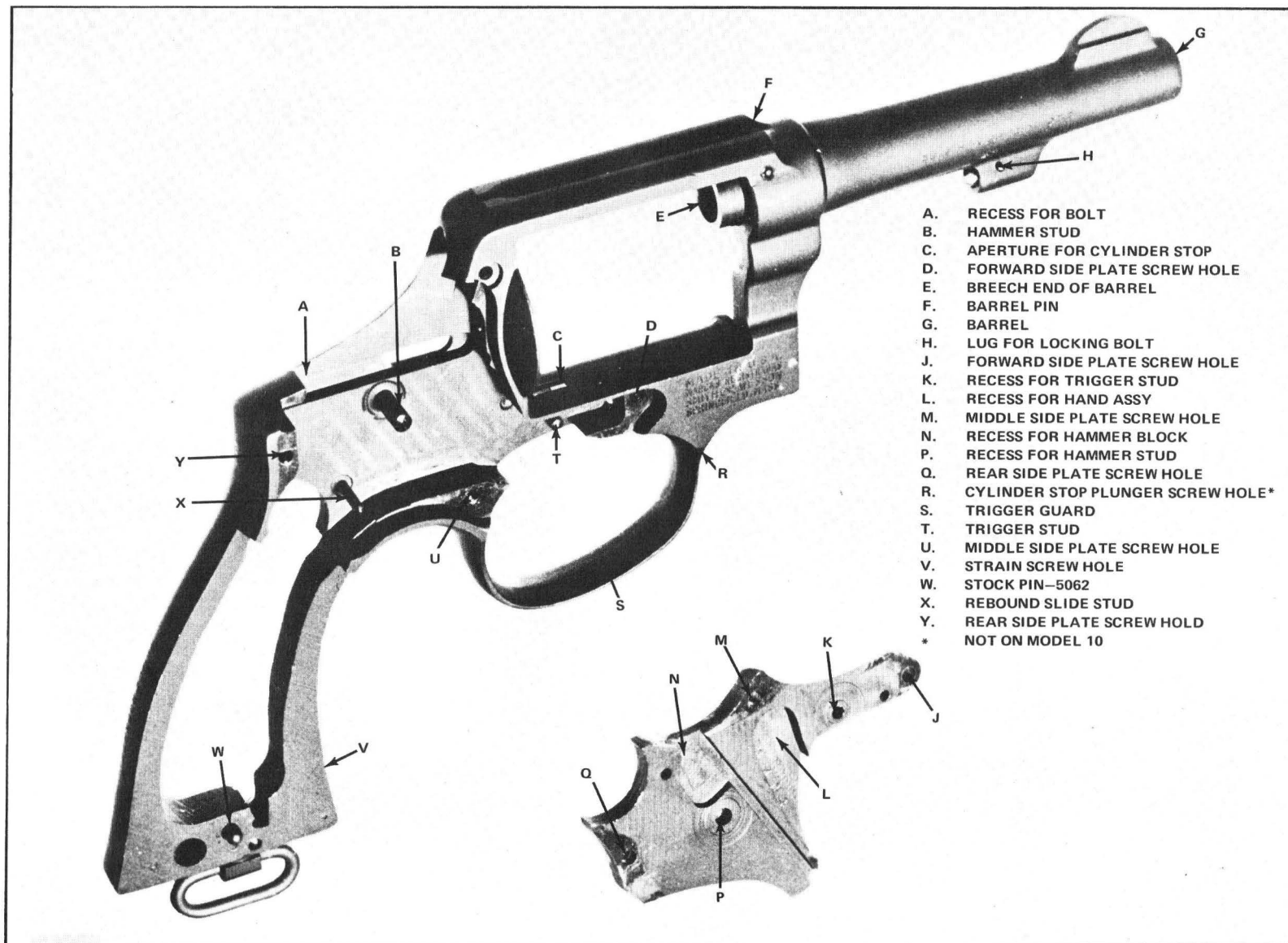


Figure 4-3. Frame, Barrel, and Side Plate Inspection Points and Areas

n. Remove the extractor rod locking bolt (14) by driving out the locking bolt pin (12) on the lug located on the bottom of the barrel. Take care not to loose or distort locking bolt spring (13).

o. Disassemble hammer group (3) as follows:

(1) Drive out stirrup pin (10) and remove the stirrup (11).

(2) Drive out sear pin (7), taking care to prevent loss of or damage to the sear spring (9).

p. Disassemble trigger group (28) as follows:

(1) Drive out hand spring pin (32) and remove hand torsion spring (30).

(2) Drive out hand spring torsion pin (31).

(3) Drive out trigger lever pin (33) and remove trigger lever (35).

#### 4-3. BARREL AND FRAME

##### NOTE

The letters enclosed by parentheses refer to the parts called out in figure 4-3.

To remove barrel, drive out barrel pin (F) and unscrew the barrel (G) from the frame. This procedure uses a special barrel vise and a spiral formed frame wrench to prevent twisting or damage to the frame.

## SECTION II

## REPAIR AND PARTS REPLACEMENT

4-4. REPAIR PARTS ALLOCATION

The echelon of maintenance authorized to perform a specific repair is determined by the allocation of repair parts required to perform the repair. The allocation of repair parts is detailed and authorized in SL-4-00538 or in authorized superseding publications.

4-5. REPAIR PROCEDURE

Table 4-1 lists typical repair problems and procedures to be used to perform the repair.

Table 4-1. Repair Procedures

Figure Reference	Inspection /Action
4-2, 4-4	Inspect all screws for stripped threads and mutilated heads. Replace if unserviceable.
4-2, 4-4	Inspect all springs for free length, corrosion, and distortion. Inspect ends for damage or mutilation. Replace springs found with defects.  Inspect stock assemblies for cracks, deep scars, or any defect affecting the serviceability of the weapon. If the checkered stocks on the Model 10 or Victory Officer's Model are worn smooth, replace the stocks. Small cracks or chips not affecting strength are acceptable. If unrepairable or unserviceable, replace the stock assemblies.
3-1, 4-1	Inspect yoke for alinement, looseness, and/or wear. Ensure that yoke number corresponds with the frame and side plate numbers. Replace yoke assembly if unserviceable. Inscribe serial number on new yoke assembly.
4-1	Inspect cylinders and extractor group for burs, pits, and other defects affecting functioning. Cylinder is to be free of corrosion and powder residue.

Table 4-1. Repair Procedures (Continued)

Figure Reference	Inspection/Action
4-1	Pits in chambers are allowed if they are not large enough to hamper extraction of cartridges. Replace the cylinder if the chambers are extensively pitted. Inspect extractor rod and extractor for alinement, extractor spring tension, and functioning of center pin. Refer to table 4-2 for disassembly of Model 10 or Victory Officer's Model.
4-3	Inspect side plate for cracks, deformation, and improper seating in the frame. Check for burs, rough edges, and obstructions in recessed portions of side plate's inner face that might affect proper functioning. Check for out-of-roundness or enlargement of screw or stud holes. Ensure that side plate bears numbers that correspond with the numbers on the frame and yoke. Replace side plate if unserviceable. Inscribe number on replacement side plate.
4-4	Check hammer block for burs or distortion. Check for wear of rebound slide hole and hammer striking surface. Replace if unserviceable.
4-4	Inspect mainspring for corrosion, cracks, burs, and wear. Inspect hooks at upper end of spring that engage with the stirrup. Smooth over any small burs and sharp edges with fine crocus cloth. Replace mainspring if unserviceable or unrepairable.
4-4	Inspect hammer group for breakage, corrosion, and wear. Examine for broken, worn, or tight hammer nose and rivet, and for defective sear spring. If sear pin, sear spring, stirrup, or stirrup pin are unrepairable or unserviceable, replace as required. Ensure that the hammer nose is smooth and well rounded, and make sure that the hammer stud hole is not worn or elongated. Check for worn or burred trigger engaging surfaces on both hammer and sear. A hammer tang with light knurling is acceptable, provided there is sufficient gripping surface for cocking action. If any defect of the hammer is observed, replace the hammer and hammer nose assembly as a unit. Refer to table 4-2 for hammer nose replacement.
4-4	Inspect rebound slide assembly for breakage and wear, paying special attention to engaging surfaces for the hammer block, hammer, and trigger lever. Check rebound slide spring for corrosion and distortions. If the spring or rebound slide is unserviceable, replace the component.
4-1	Inspect extractor engaging surfaces and extractor spring for breakage, distortion, and wear. Remove small burs with fine crocus cloth or stone. Replace these components if found unserviceable.

Table 4-1. Repair Procedures (Continued)

Figure Reference	Inspection/Action
4-2, 4-4	Inspect trigger and trigger lever for wear, cracks, or breakage. Examine trigger for burred on worn hammer, sear, and cylinder stop engaging surfaces. Determine whether holes in trigger for hand spring pin, hand spring torsion pin, trigger pin, or trigger lever pin are enlarged or burred. If trigger or trigger lever is unserviceable, replace these components. If pins for hand spring or trigger lever are unserviceable, replace them. If trigger pull correction cannot be made by replacement of parts, refer to table 4-2.
4-4	Inspect cylinder stop on the cylinder and trigger engaging surfaces for breakage, wear, and/or distortion. Inspect for elongated cylinder stop stud hole. Replace unserviceable components, as necessary.
4-4	Inspect thumbpiece for breakage, for wear on engaging surfaces, and for enlargement of the stud hole. Replace if found unserviceable.
4-4	Inspect bolt for breakage, stripped threads, rough spots, distortion, or other defective conditions. Check for wear on hammer contact surfaces. Remove any burrs with fine crocus cloth. Check bolt plunger and bolt plunger spring for wear or distortion. Replace unserviceable parts as required.
4-4	Examine locking bolt, locking bolt spring, and locking bolt pin for burrs wear, or distortion. Replace unserviceable parts.
4-3	Inspect barrel for pitting, bulges, and sharpness of lands. Inspect ends for burrs. Inspect back end of the barrel for erosion due to combustion gases. Inspect front sight for deformation or looseness. Replace the barrel if found unserviceable.
4-3	Inspect frame for breakage, twist, or corrosion, especially around the breach end of the barrel. Check the condition of the studs on which the hammer, the rebound slide, the trigger, and the cylinder stop are installed. Check for roughness or burrs in recessed areas. Examine for cracks or burred threads where the barrel screws into the frame. Inspect the trigger guard for bends and determine if the bends interfere with trigger action. Serial numbers and markings on the frame should be readable. Ensure that the frame bears the same number that appears on the yoke and side plate. Examine the recoil plate for pits and ensure that the holes for the firing pin and bolt are not elongated. Check the condition of the stock retaining screw; if defective, replace it.

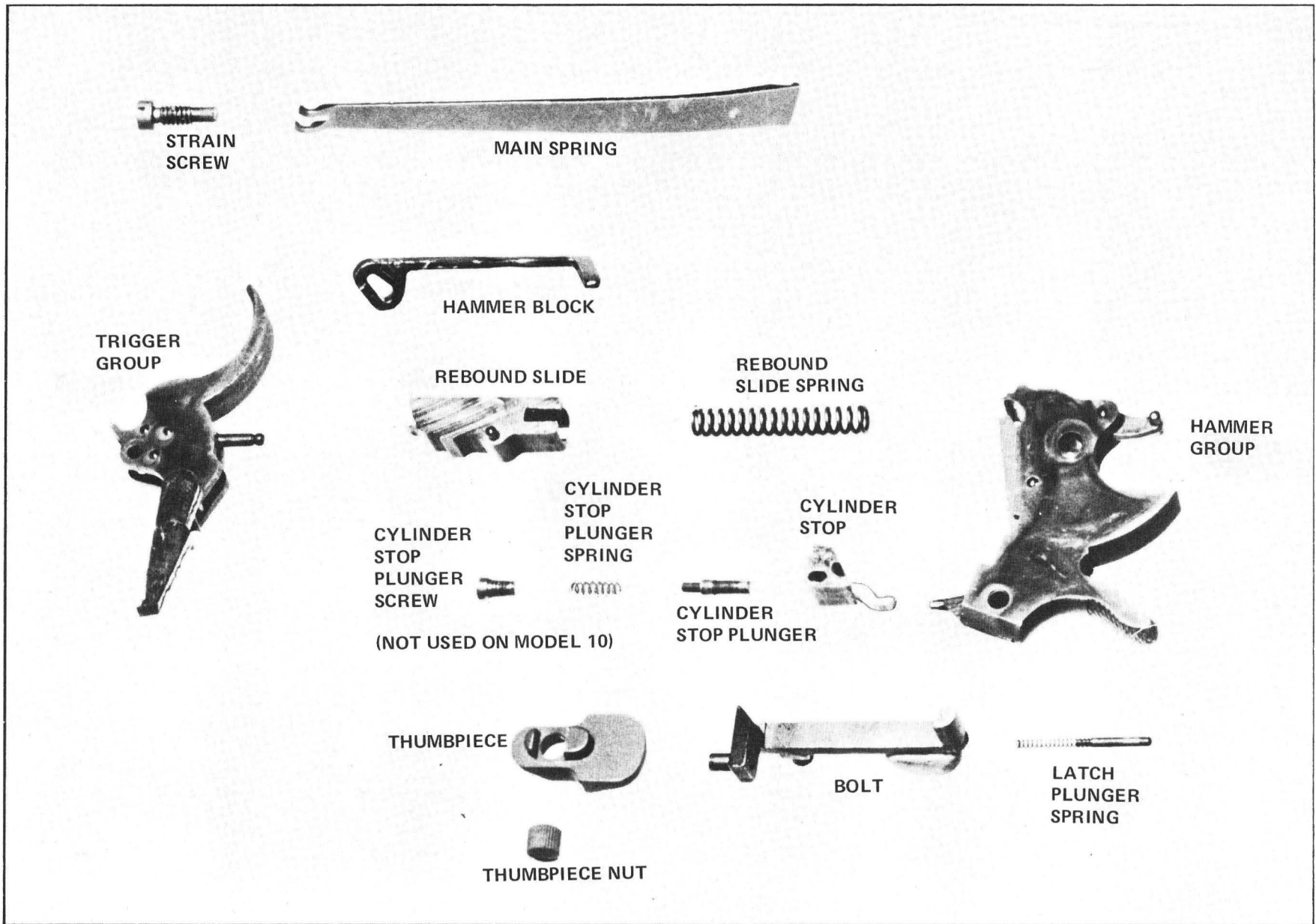


Figure 4-4. Internal Component Inspection Points and Areas



## NOTE

If the frame is unserviceable, code out the complete weapon, as no frame replacement is authorized.

4-6. SPECIAL REPAIR TECHNIQUES

Table 4-2 presents special repair techniques for correction of conditions discovered during maintenance inspections. These repair techniques require special training and should not be made by personnel who have had no previous experience in these techniques.

## 4-6.1 ITEM/PROCEDURES

a. Special repair techniques include the following Item Procedures:

1. Cylinder end shake
2. Yoke end shake
3. Rough extractor
4. Cylinder binds
5. Hammer nose protrusion
6. Cylinder alinement
7. Trigger pull correction
8. Weapon does not cock

b. Table 4-2, Special Repair Techniques, is divided into two main columns, item/procedures and how to repair the item.

Table 4-2. Special Repair Techniques

Item/Procedures	How to Repair
<p>1. <u>Cylinder End Shake</u></p> <p>a. Close the cylinder assembly after checking to ensure that the extractor rod is tightly screwed into the extractor assembly.</p> <p>b. Insert cylinder front clearance gage, shown in figure 2-3, between barrel and cylinder. Minimum clearance 0.003; maximum clearance 0.006.</p> <p>c. Insert cylinder rear clearance gage, shown in figure 2-6, between cylinder and recoil plate. If the 0.062 gage fits snugly, the clearance is correct. If the 0.064 gage does not fit, clearance is correct. If the gage fits, the cylinder has too much end shake.</p>	<p>a. Check extractor rod collar for correct size. Replace with over or undersize as required.</p> <p>b. Check the breach for lead buildup or carbon residue.</p> <p>c. Remove the cylinder from yoke and peen the circumference as shown in figure 4-5, using yoke alignment tool, hammer and suitable hard surface. If area is over-peened, file off excess material.</p>
<p>2. <u>Yoke End Shake</u></p> <p>Open cylinder and move the yoke back and forth with fingers. If there is too much end shake, it indicates a worn side plate screw or worn yoke button.</p>	<p>a. Check screw and replace if worn. Recheck the yoke for end shake.</p> <p>b. Peen yoke button as shown in figure 4-6 with hammer and suitable surface.</p>
<p>3. <u>Rough Extractor</u></p> <p>Open cylinder and push extractor rod to the rear. Rod should move smoothly and return to its original position without pull action.</p>	<p>a. Inspect extractor rod to determine if it is bent. Replace, if necessary.</p> <p>b. Check extractor points for burs and bends. Remove burs with light abrasive paper or stone. Replace, if bent and unrepairable.</p> <p>c. Check extractor rod for proper size. If extractor rod is loose, retighten.</p>

Table 4-2. Special Repair Techniques (Continued)

Item Procedure	How to Repair
3. <u>Rough Extractor</u> (Continued)	d. Check rod collar for correct size and fit. Replace with oversize collar, if required.
4. <u>Cylinder Binds</u>  Rotate cylinder in closed position. Cylinder should rotate freely without hitting frame.	a. Use yoke alinement gage to check alinement of yoke. If yoke is out of alinement, use babbit material to either open or close yoke frame. Refit and retest yoke to ensure proper alinement.  b. Inspect yoke screw for proper size and fit. Replace screw, if undersized.  c. Check cylinder stop for proper fit. Smooth burs, replace spring, or replace cylinder stop, as required.
5. <u>Hammer Nose Protrusion</u>  a. Inspect hammer for broken or tight firing pin (hammer nose).  b. Use firing pin protrusion gage shown in figure 2-7. Minimum protrusion: 0.040; maximum: 0.050.  NOTE  Hammer nose protrudes through recoil plate when trigger is pulled and held after hammer falls.	a. Inspect hammer nose to ensure that rust or carbon buildup is not causing it to bind. Clean nose, if required.  b. Replace hammer nose if protrusion is below minimum.  c. Stone the hammer nose with light stone to remove burs.
6. <u>Cylinder Alinement</u>  Check all cylinder chambers with the cylinder alinement gage, as shown in figure 2-4. If gage hangs on cylinder, it indicates improper alinement with breech.	a. Check for binding action between cylinder and breech. If cylinder is touching breech, it indicates too much cylinder end shake or improper yoke alinement.

Table 4-2. Special Repair Techniques (Continued)

Item/Procedure	How to Repair
<p>6. <u>Cylinder Alinement</u> (Continued)</p>	<ul style="list-style-type: none"> <li>b. Check extractor rod for bent condition.</li> <li>c. Check for yoke end shake or misaligned yoke.</li> <li>d. Check trigger lever for burrs and size. Remove burrs or replace lever if undersize.</li> </ul>
<p>7. <u>Trigger Pull Correction</u></p> <p>a. Test the trigger pull for the weapon by using the trigger pull fixture shown in figure 2-2.</p> <p>Single Action: Place a 3-pound weight on the fixture. Cock the revolver and hold the barrel in the vertical position. Engage the trigger with the hook provided on the fixture and lift the weapon and fixture. If the hammer falls, the trigger pull is too light. If the hammer does not fall, place a 5-pound weight on the fixture. Repeat the lifting procedures. If the hammer does not fall, the trigger pull is too heavy.</p> <p>Double Action: Place a 14-pound weight on the fixture. Do not cock the weapon. Engage the trigger with the hook as described in the previous paragraph and lift the weapon and fixture. The weapon should complete its firing cycle. If the weapon does not fire, correction of the trigger pull has to be made.</p>	<ul style="list-style-type: none"> <li>a. Inspect the hammer assembly for broken, worn, or burred mating surfaces with trigger assembly. Remove burrs, replace unserviceable parts, and retest trigger pull.</li> </ul>
<p>8. <u>Weapon Does Not Cock</u></p> <p>The weapon will not cock in either single or double action.</p>	<ul style="list-style-type: none"> <li>a. Check the cylinder stop for proper size. If the stop has been filed too much, replace the part with a new stop.</li> <li>b. Check the stop ball and determine if it is too big and sticking in the cylinder notch. File the ball as required.</li> </ul>

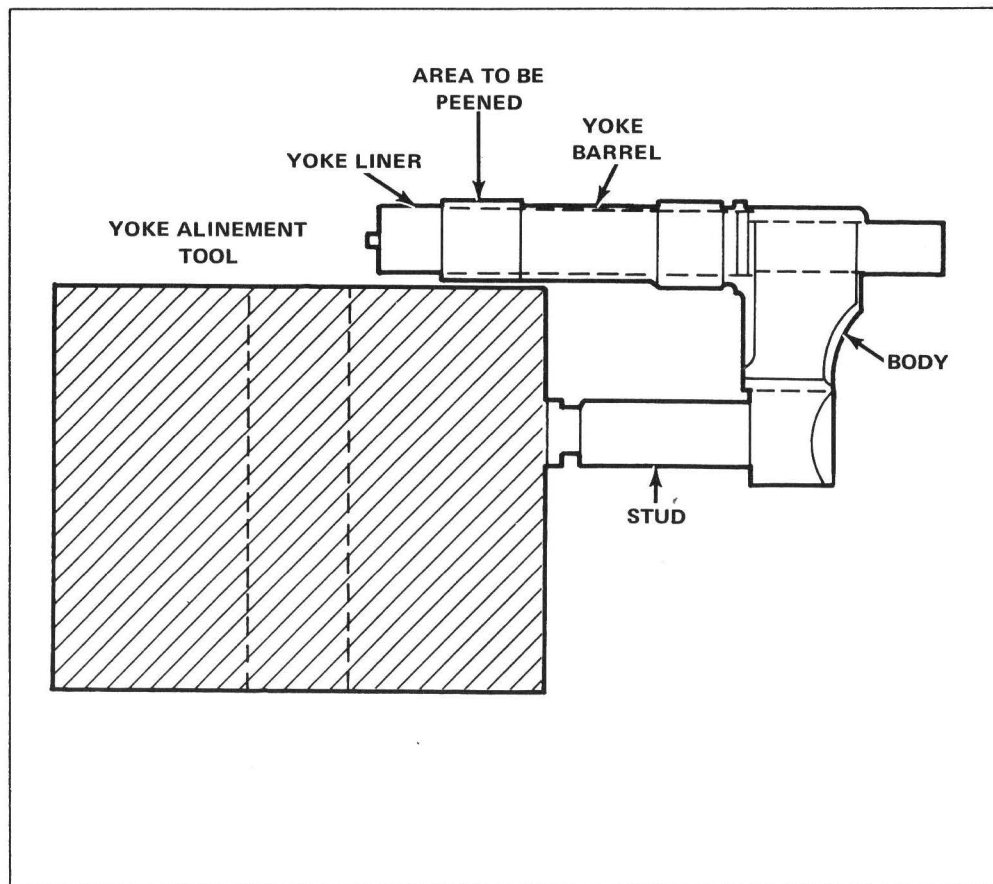


Figure 4-5. Peening Yoke for Cylinder End Shake

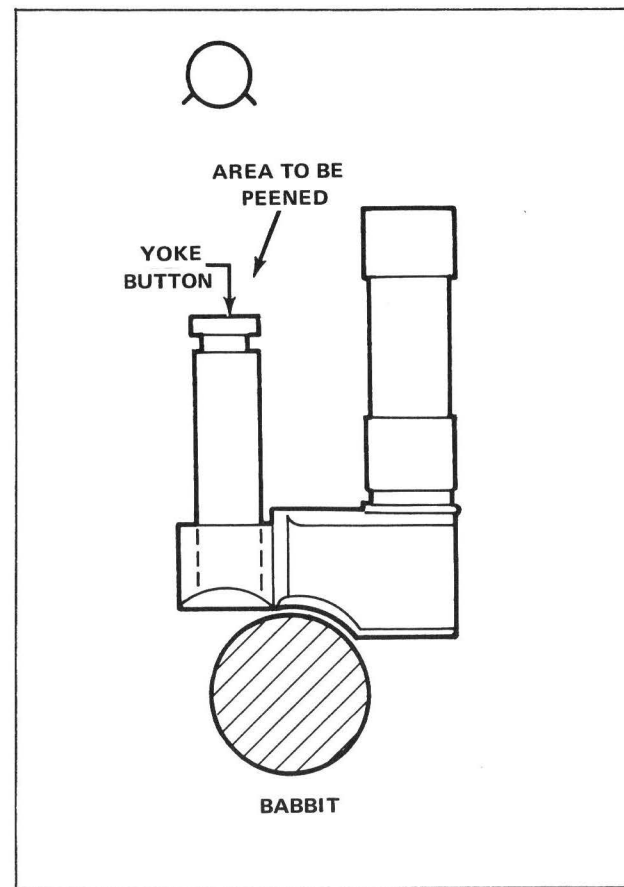


Figure 4-6. Peening Yoke for Yoke End Shake

## SECTION III

## ASSEMBLY

4-7. BARREL AND FRAME

To install the barrel (G, figure 4-3), use a special barrel vise and a special frame wrench. Screw frame onto the barrel, being careful not to twist or distort the frame. After the barrel is fully seated, drive the barrel securing pin (F, figure 4-3) into the recess provided. Check the barrel to ensure that it is fully seated and that the front sight is alined with the rear sight.

4-8. LOCK MECHANISM, SIDE PLATE, AND STOCKS

## NOTE

Except where otherwise noted, the figures in parentheses refer to callouts in figure 4-2.

a. Install extractor rod locking bolt spring (13) and extractor rod locking bolt (14) with the flat surface facing up. Secure the assembly by driving the locking bolt pin (12) into the recess provided on the fixture.

b. Install the cylinder stop (18) on its pin in the frame. Install the cylinder stop plunger (17), cylinder stop plunger spring (16), and cylinder stop plunger screw (15) in the recess provided.

## NOTE

The Model 10 does not have a cylinder stop plunger or cylinder stop plunger screw. The cylinder stop on the Model 10 uses a spring which is positioned beneath the cylinder stop and held in place by the frame.

c. Assemble the hand assembly (29) to the trigger lever (34) as follows:

(1) Install hand spring torsion pin (31) and hand torsion spring (30) in the trigger lever (34). Using a suitable small screwdriver, exert upward pressure on the hand spring and install hand assembly so that its stud engages with the spring.

(2) Insert trigger lever (35) into the trigger and drive the trigger lever pin (33) into its recess to secure the trigger lever.

d. Install the trigger group (28) on its mounting study (T, figure 4-3). Hold the upper end of the hand assembly (29) to the rear until it clears the frame.

- e. Install bolt plunger (38) and the bolt plunger spring (37) into the recess in rear of the bolt (19).
- f. Install the bolt in its recess (A, figure 4-3) on the frame by pressing the bolt plunger into the recess on the bolt.
- g. Position the thumbpiece (2) and secure it in position with the thumbpiece nut (1).
- h. Assemble the hammer group (3) by installing the stirrup (11) and securing the stirrup to the hammer with the stirrup pin (10). Install the sear spring (9) and sear (8) in the hammer and secure these components with the sear pin (7).
- i. Install hammer group onto the hammer stud (B, figure 4-3).

## NOTE

This step is accomplished by holding the trigger and bolt in the rearmost position.  
(See figure 4-7.)

- j. Place the rebound slide spring (21) into the recess in the rebound slide (20). Compress the rebound slide spring and install the rebound slide assembly against the retaining stud (X, figure 4-3) with the beveled end forward so that the rear end of the trigger lever (35) is positioned in the blind recess on the forward face of the rebound slide (20).
- k. Install the mainspring (36) by engaging its hooked end with the stirrup (11) and by pressing the lower end into its recess in the base of the butt frame.
- l. Install the strain screw (39) into its recess and tighten.
- m. Install the hammer block (22). Refer to figure 4-8 for proper installation of the lock mechanism components.
- n. Before attempting to position side plate (24), care should be taken to ensure that the hammer block (22) is in its uppermost position. The uppermost position will coincide with the recess (L, figure 4-3) in the side plate's inner surface. Install the side plate and check to ensure that it is properly seated in the frame. Install the upper side plate screw (23) and rear side plate screw (26).

## NOTE

If the rear side plate screw (26) is shorter in length than the side plate screw that secures the yoke assembly, use the shortest screw for the side plate to prevent the yoke assembly from binding.

- o. Attach the stock assemblies (27) and (40) and secure these components with the stock screw (41).

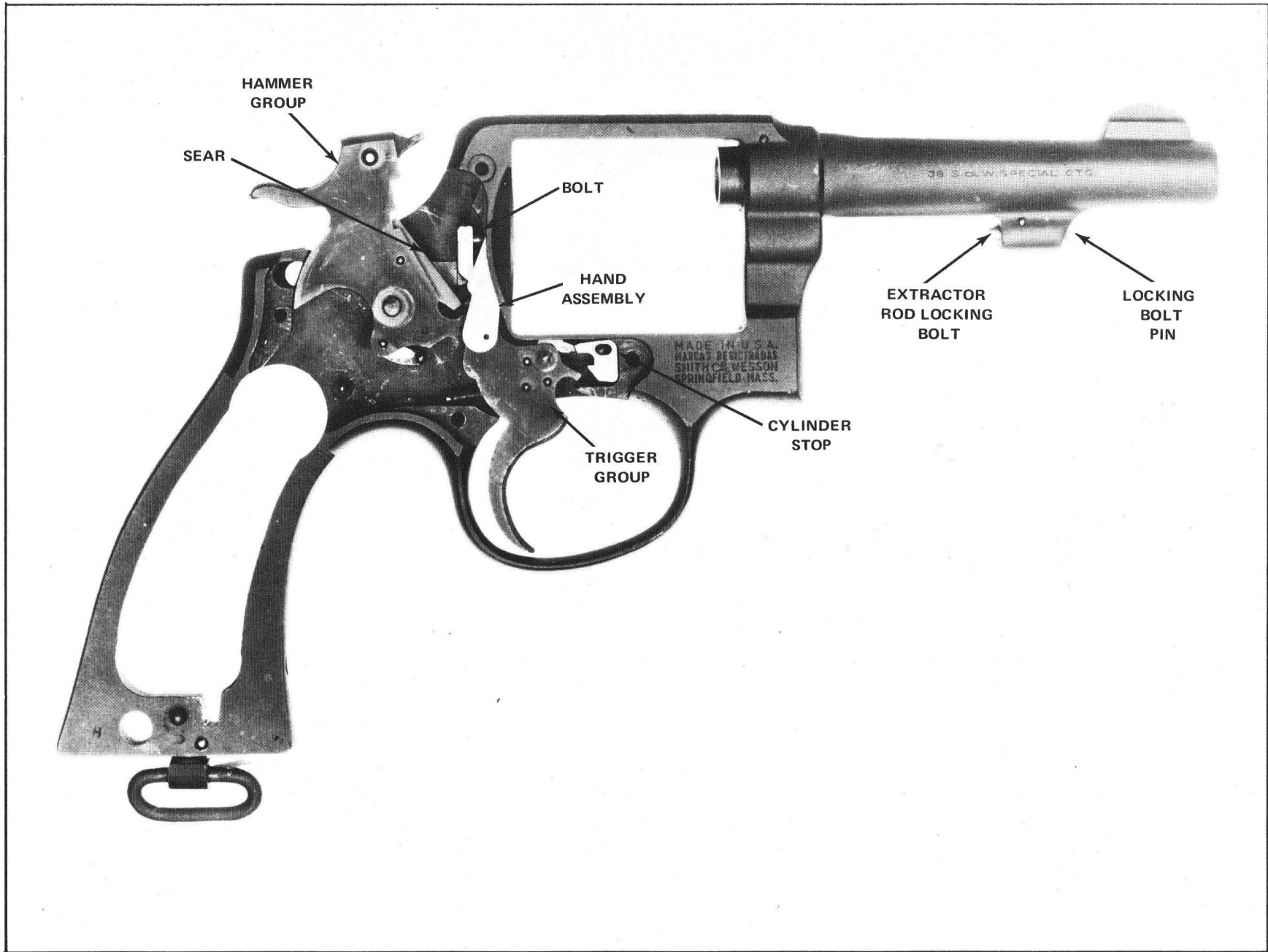


Figure 4-7. Hammer Group Installed in Frame



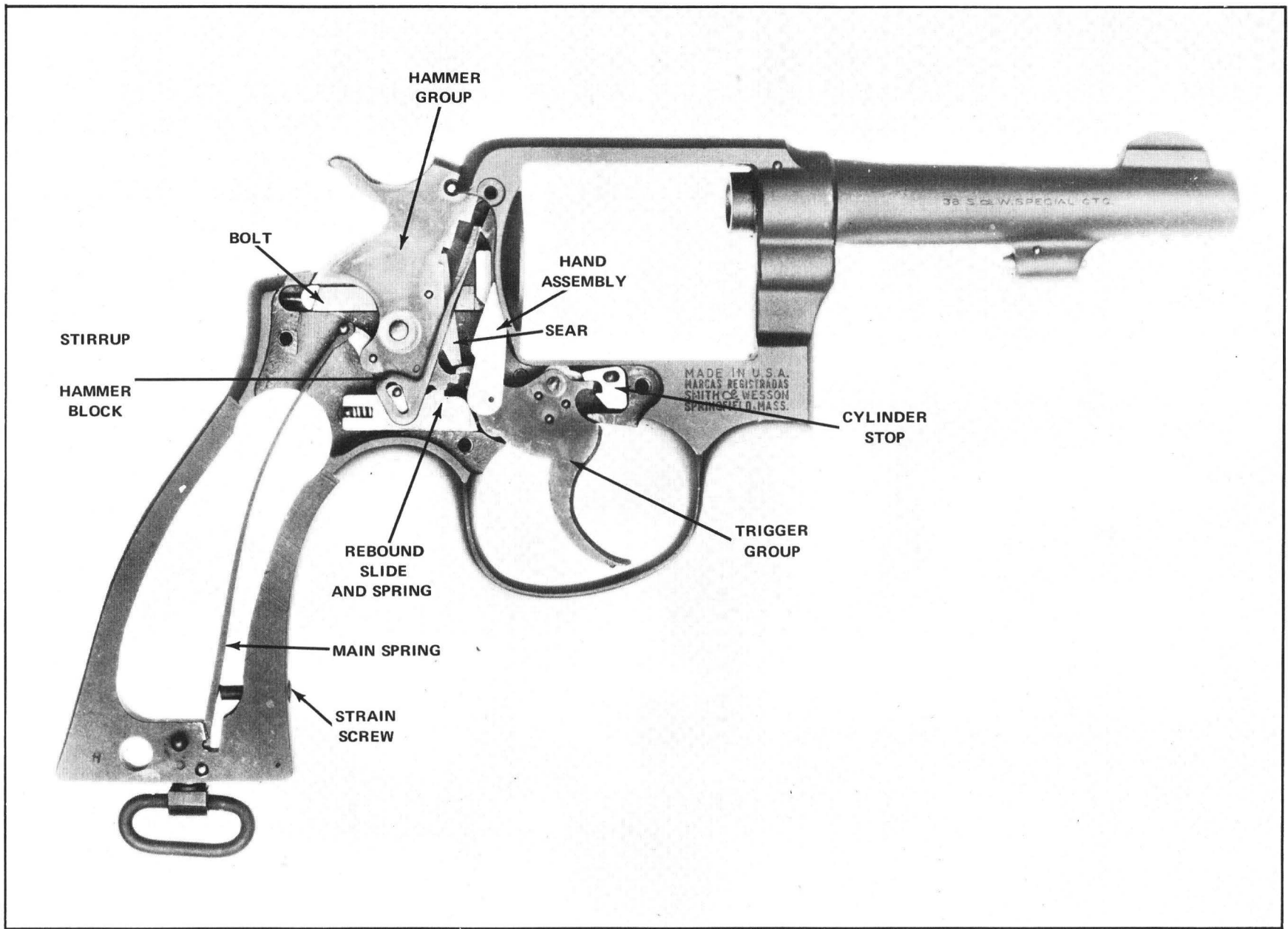


Figure 4-8. Lock Mechanism Installed in Frame

4-9. CYLINDER AND EXTRACTOR GROUP

NOTE

The figures in parentheses refer to the callouts shown in figure 4-1.

- a. Insert the extractor (14) into the central recess in the rear of the cylinder (13). Aline the groove located on the side of the extractor rod with the pin located in the cylinder recess.
- b. Insert the extractor spring (12) into the forward end of the cylinder (13).
- c. Place the extractor rod collar (11) on the end of the extractor spring (12).
- d. Insert the center pin (10) and center pin spring (9) through the extractor rod collar (11) and spring (12).
- e. Slide the yoke (1) over the assembly and into the central recess in the cylinder (13).
- f. Slide the extractor rod (8) over the center pin (10) and screw the extractor rod until it is fully seated.

NOTE

The Model 10 has a left-hand or counterclockwise thread.

- g. Aline the yoke assembly stud with the recess provided in the frame. Slide the yoke assembly and attached cylinder into the recess. Secure the yoke and cylinder with the remaining lower side plate screw (25, figure 4-2).
- h. Position the cylinder and yoke assembly into the frame of the revolver.

CHAPTER 5  
FINAL ACCEPTANCE

5-1. GENERAL

Materiel to be returned to user must meet the standards prescribed in chapter 4. The following paragraphs present the final acceptance inspections required for repaired materiel intended for return to the user.

5-2. ACCEPTANCE TESTING

a. Check overall appearance of the assembled weapon for finish of metal. A worn surface is objectionable because it is more susceptible to corrosion. The protective finish should be uniform on exterior surfaces of all major components.

b. Light pitting of the barrel bore is not a cause for rejection. Check to ensure that the barrel is fitted tightly to the frame and that the front sight is undamaged and in alinement with the rear sight groove.

c. Check the cylinder rotation and locking mechanism to ensure that it alines with the bore and barrel. Ensure that the cylinder is free of corrosion and powder fouling and that it locks in all positions. Maximum clearance between the forward face of the cylinder and the barrel breech face is 0.015-inch.

d. Inspect extractor mechanism for alinement, tension of extractor spring, and overall functioning of extractor assembly.

e. Check smoothness of hammer operation. Ensure that it rebounds to a safe position after the trigger is snapped. A hammer tang with light knurling is acceptable, provided there are sufficient gripping edges to allow for cocking action. Examine hammer for broken or tight-fitting firing pin (hammer nose). Firing pin should be smooth and well rounded and give proper protrusion to ensure contact with the cartridge primer.

f. Inspect stocks for loose or missing stock screw, and for cracks and burs.

g. Check the trigger for proper return to the ready position without binding. Acceptable trigger pull is from 3 to 5 pounds for single action and 14 pounds maximum for double action.

h. Examine side plate for missing screws and for proper seating in the frame.

i. Test functioning of thumbpiece and tension of thumbpiece spring.

j. Examine the frame for cracks where the barrel is screwed into the frame. Check the yoke and cylinder numbers to ensure that they correspond with number on frame.

k. Check headspace, cylinder end shake, and yoke assembly end shake.

l. Check overall functioning of weapon. Operation should be smooth and without binding. Particular emphasis should be placed on revolvers that have component and/or subassembly replacements.

m. Check for the following malfunctions:

(1) Misalignment of chamber and barrel and failure of cylinder to index correctly.

(2) Incorrect spacing of barrel and cylinder.

(3) Incorrect headspace.

(4) Misfiring.

(5) Stalling and binding of hammer and trigger mechanism.

n. To test the safety device operation on the revolver, cock the hammer on the unloaded revolver. Holding the hammer back with the thumb, press the trigger and let the hammer forward about 1/4-inch, still holding with the thumb. Release the trigger. Release the hammer and let it fly forward. If the firing pin projects through the hole in the frame, the safety is faulty.

o. To test functioning of the cylinder, keep the hammer down and attempt to rotate the cylinder. Cylinder rotation should not exceed 1/64-inch on its axis. Repeat this test with the hammer fully cocked.

#### NOTE

With the hammer about one-fourth cocked, the cylinder rotates freely.

p. Check functioning of cylinder locking mechanism, both at the rear of the cylinder and at the front where the arm of the yoke latches to the front end of the frame.

#### 5-3. PREPARATION FOR SHIPMENT

These weapons shall be prepared for shipment in accordance with MIL-P-14313C dated 8 October 1965. Each revolver will be cleaned, dried, preserved, and packaged in a manner which will afford adequate protection against corrosion, deterioration, and physical damage during shipment from the source to the receiving activity for immediate use or for controlled humidity storage.

APPENDIX A

REFERENCES

The following references will be reviewed periodically to ensure that the latest changes and revisions are incorporated and to add new publications for the procedures covered in this manual. In addition to the publications listed, pertinent Marine Corps orders and local operating procedures should apply.

SUPPLY MANUALS

1. Repair Parts List for Revolver, Caliber .38 Special Model 10 ..... SL-4-00538

REPORTS AND FORMS

1. Unsatisfactory Equipment Report ..... DD Form 1686
2. Modification and Maintenance Record - Tactical Equipment ..... NAVMC 10530-SD
3. Discrepancy in Shipment or Billing ..... DD Form 1348m-3
4. Parts and End Item Requisition ..... DD Form 1348
5. Stock Record Card ..... NAVMC 708

TECHNICAL MANUALS & INSTRUCTIONS

1. Cleaning of Ordnance Materiel ..... TM 9-208-1
2. Inspection by Witnessing Officer Individual Arms ..... TI-8005-15/4
3. Small Arms Targets and Target Material ..... TM 6920-14/1
4. Cleaning, Drying, Abrading Equipment ..... TM 9-208-2
5. Malfunction and Accident Reports, Ammunition and Explosives ..... TI-8010-15/1\_
6. Pistols, Commercial; Maintenance, Repair Parts, Tools and  
Equipment ..... TM 9-1005-206-14P/3
7. Commercial Revolvers ..... TM 9-1005-206-14P/1

APPENDIX B

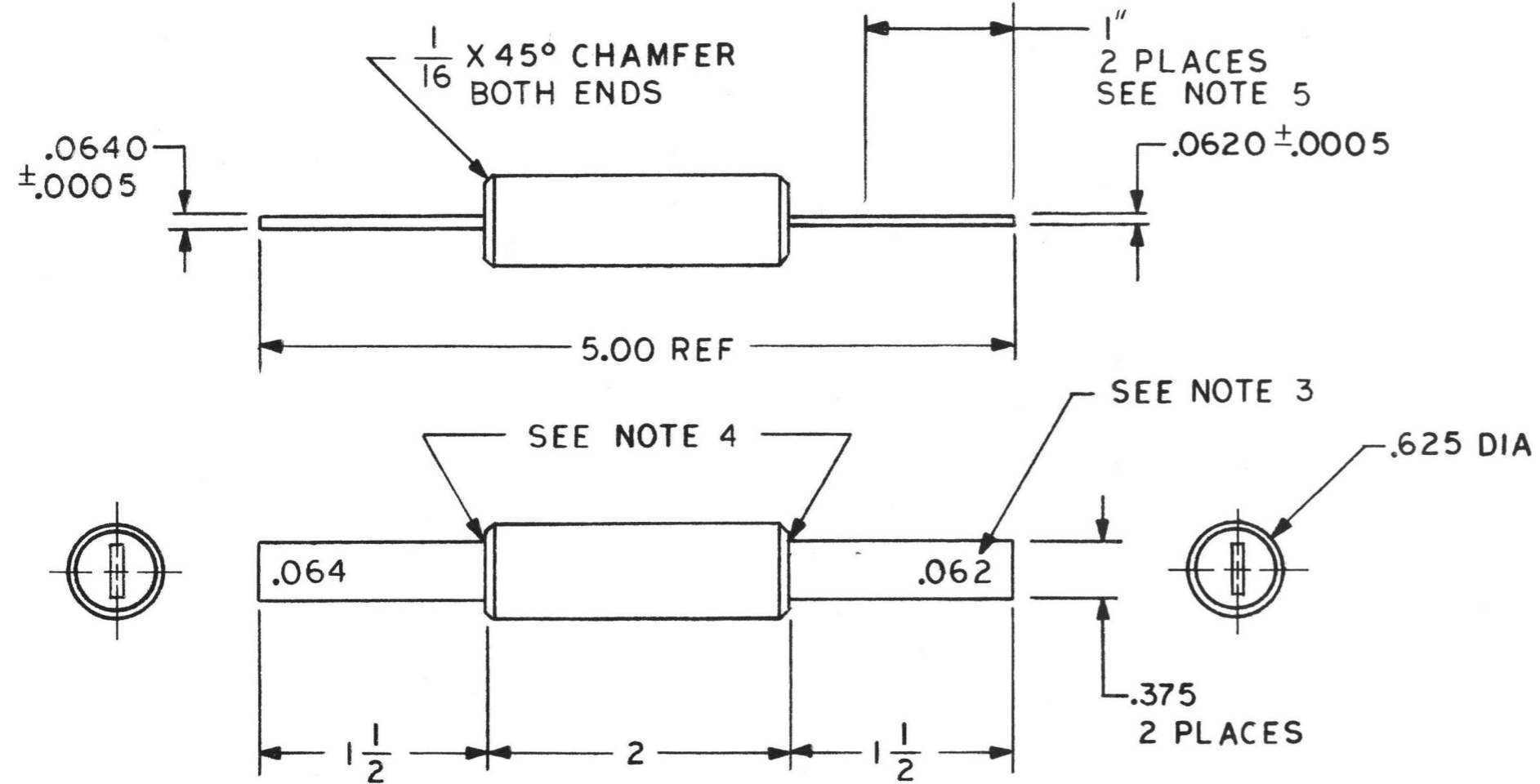
ENGINEERING DRAWINGS OF SPECIAL TOOLS FOR CAL.38 S & W REVOLVERS

B-1/(B-2 blank)  
EUGENE KAPLAN

5-19-46

<b>DATA LIST</b>	AGENCY (CONTRACTOR IDENTIFICATION) U.S. MARINE CORPS HEADQUARTERS, U.S. MARINE CORPS WASHINGTON, D.C. 20380			CONTRACT NO. M00027-70-C- 0043	CODE IDENT 87990	<b>DL</b> 715001A0000	REVISION LTR DATE
	LIST TITLE <b>ENGINEERING DRAWINGS OF SPECIAL TOOLS FOR CAL.38 S &amp; W REVOLVERS</b>				PREPARED BY PRI	DATE 2/25/71	REV AUTH NO.
				AUTHENTICATION	DATE	SHEET 1 OF 1 SHEETS	
CODE IDENT	DWG SIZE	DOCUMENT NUMBER	SHEET NO.	REV LTR ISSUE SYMBOL	NOMENCLATURE OR DESCRIPTION		
	B	715001A0001	1		REAR GAGE S & W CAL.38		
	B	715001A0002	1		YOKE ALIGNMENT TOOL S & W CAL.38		
	B	715001A0003	1		FIRING PIN PROTRUSION GAGE S & W CAL.38		
	B	715001A0004	1		CYLINDER ALIGNMENT TOOL S & W CAL.38		

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



NOTES:

1. MATERIAL, TOOL STEEL. SHALL BE IN ACCORDANCE WITH QQ-T-570 CLASS O1 OR O2. ALTERNATE MATERIAL SHALL BE IN ACCORDANCE WITH QQ-T-590 CLASS M1 OR M2.
2. OPTIONAL METHOD OF CONSTRUCTION PART MAY BE SINGLE PIECE CONSTRUCTION.
3. PERMANENTLY MARK IN ACCORDANCE WITH MIL-STD-130, CHARACTERS SHALL BE 1/8 HIGH AND LOCATED APPROXIMATELY AS SHOWN.
4. BRAZE IN ACCORDANCE WITH MIL-B-7883 TYPE V, GRADE B.
5. HEAT TREAT IN AREAS SHOWN TO ROCKWELL C 35-40.

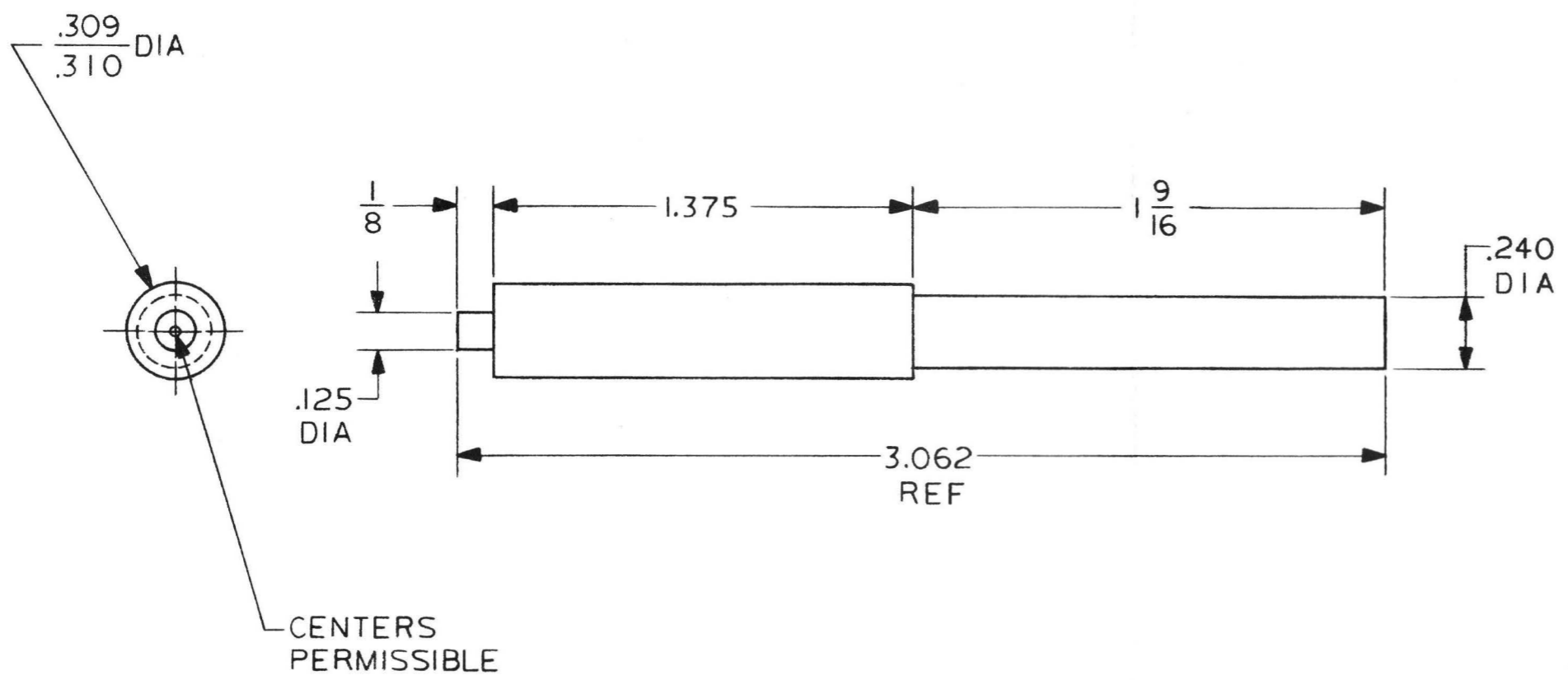
REQD.	PART NO.	ITEM	DESCRIPTION	MATL	MATL SPEC	UNIT WT
CONTRACT NO. M00027-70-C-0043			LIST OF MATERIAL			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: FRACTIONS ± 1/32 DEC. ± .010 ANGLES ± 5°			NAME	INIT	DATE	<p style="text-align: center;"><b>REAR GAGE</b> <b>S &amp; W CAL. 38</b></p>
			DESIGNER			
			DRAWN		2-8-71	
			CHECKED		2-9-71	
			APPROVED			
DASH NO.	NEXT ASSY	USED ON	SCALE 1 / 1			UNIT WT
					CODE IDENT NO. 87990	SHEET 1 OF 1

U.S. MARINE CORPS  
HEADQUARTERS, U.S. MARINE CORPS  
WASHINGTON, D. C. 20380

SIZE  
B 715001A0001



REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL



- NOTES:
1. MATERIAL, TOOL STEEL SHALL BE IN ACCORDANCE WITH QQ-T-570 CLASS O1 OR O2. ALTERNATE MATERIAL SHALL BE IN ACCORDANCE WITH QQ-T-590 CLASS M1 OR M2.
  2. HEAT TREAT TO ROCKWELL C 35-40.

REQD.	PART NO.	ITEM	DESCRIPTION	MATL	MATL SPEC	UNIT WT
CONTRACT NO. M00027-70-C-0043			LIST OF MATERIAL			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: FRACTIONS ± 1/32 DEC. ± .010 ANGLES ±			NAME	INIT	DATE	<p><b>YOKE ALIGNMENT TOOL S &amp; W CAL 38</b></p> <p>U.S. MARINE CORPS HEADQUARTERS, U.S. MARINE CORPS WASHINGTON, D. C. 20380</p> <p>SIZE <b>B</b> 715001A0002</p>
			DESIGNER			
			DRAWN RGS		2-8-71	
			CHECKED NME		2-9-71	
			APPROVED			
DASH NO.	NEXT ASSY	USED ON	SCALE 2/1		UNIT WT	CODE IDENT NO. 87990 SHEET   OF