

TM9-1295

WAR DEPARTMENT TECHNICAL MANUAL

ORDNANCE MAINTENANCE

12th Evacuation Hospital
Fort Ord, California

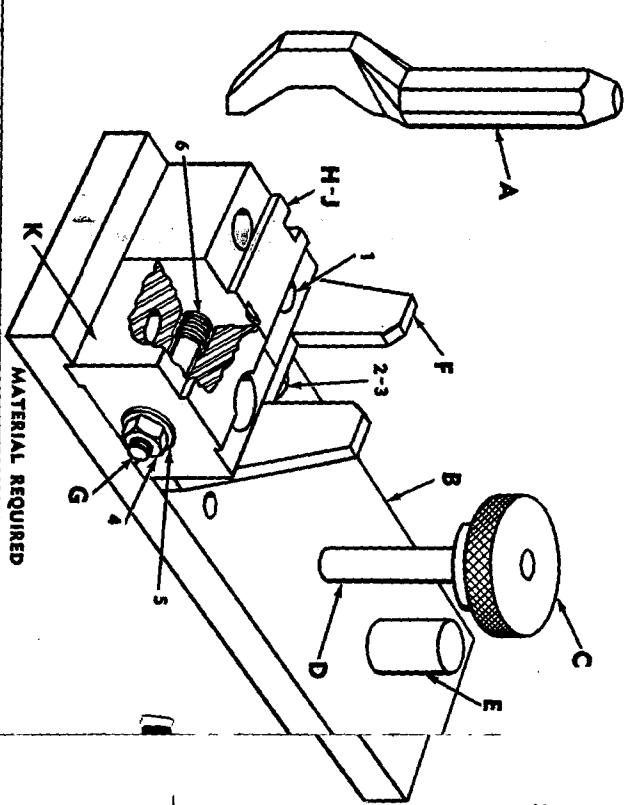
Cal. .45 AUTOMATIC

PISTOL

M1911 AND M1911A1

MICROFICHE
AVAILABLE

- NOTES: 1. KEY LETTERS IDENTIFY FABRICATED PARTS. NUMERALS IDENTIFY STANDARD HARDWARE. 2. ALL DIMENSIONS SHOWN ARE IN INCHES. 3. THE USE OF THIS TOOL IS ILLUSTRATED IN FIGURE 31.



ITEM NO.	QTY REQD	DESCRIPTION	BTH (HES)	PART NUMBER
1	4	5/16-18UNC-2A X 7/8 HEXAGON-SOCKET BOLT		451987
2	1	1/4-20UNC-2A X 1/2 HEXAGON-HEAD CAP SCREW		120706
3	1	1/4-INCH FLAT WASHER		446179
4	1	3/8-16UNC-2B HEXAGON PLAIN NUT		120377
5	1	3/8-INCH FLAT WASHER		446363
6	1	SPRING TO SUIT (MIN I.D. 3/8, MAX OD 9/16, ASSEMBLED HEIGHT 3/8)		
ALLOY TOOL STEEL				
D	1	3/8 ROUND	1/2	
G	1	3/4 ROUND	1/4	
E	1	1-1/4 X 2 FLAT	40	
H	1		40	
J	1		40	
K	1		40	
CARBON TOOL STEEL				
A	1	3/4 OCTAGON	1/2	
COLD FINISH CARBON STEEL BAR				
F	1	3/16 X 3 FLAT	1/4	
B	1	5/8 X 3 FLAT		
C	1	1-3/4 ROUND		

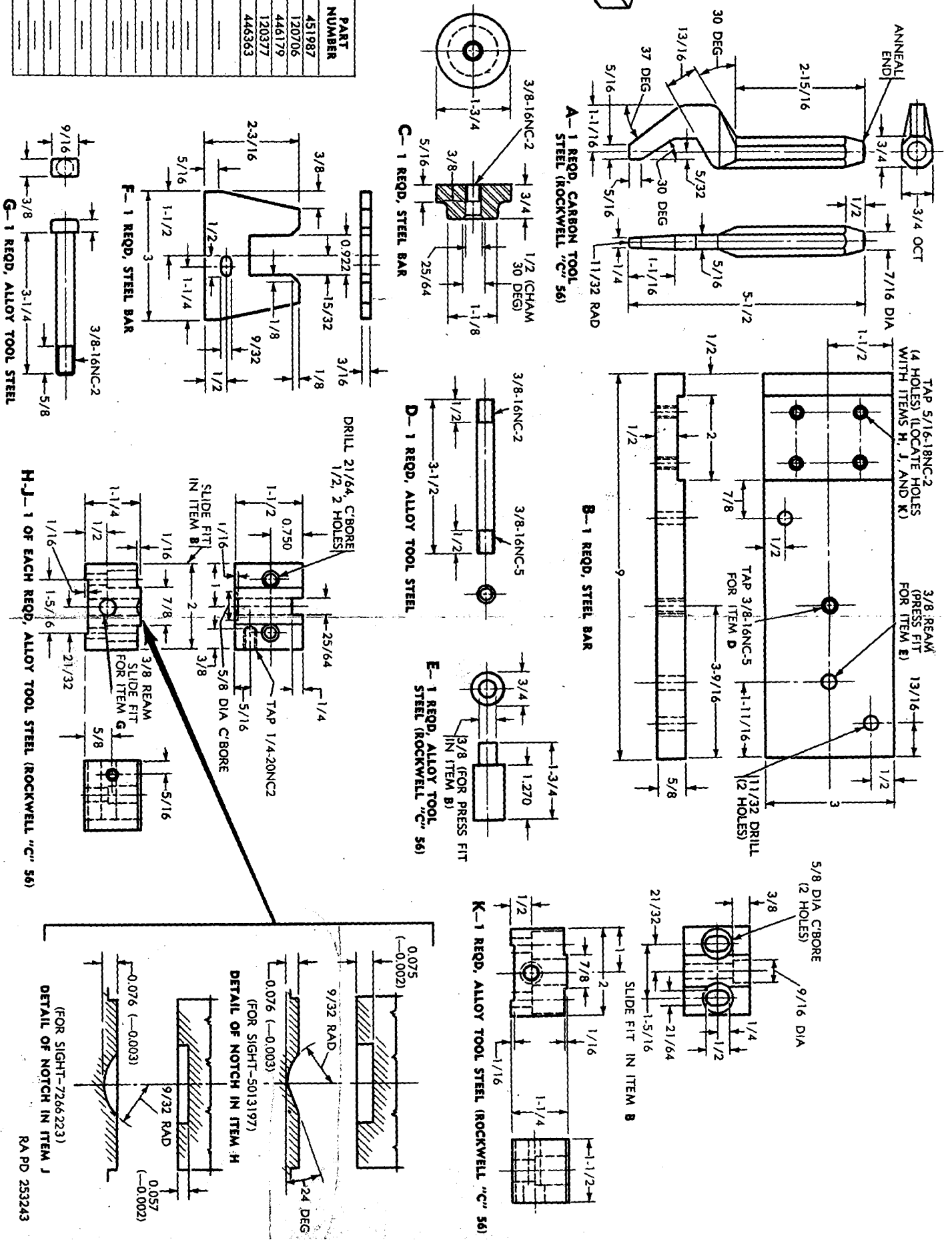


Figure 10. Improved feature for swaging front sight in place.

WAR DEPARTMENT TECHNICAL MANUAL
TM 9-1295

This manual supersedes TM 9-1295, 9 November 1942

ORDNANCE MAINTENANCE

Cal. .45 AUTOMATIC

PISTOL

M1911 AND M1911A1



WAR DEPARTMENT • SEPTEMBER 1947

WAR DEPARTMENT

Washington 25, D. C., 8 September 1947

TM 9-1295, Ordnance Maintenance, Cal. .45 Automatic Pistol M1911 and M1911A1, is published for the information and guidance of all concerned.

The information in this manual is effective as of 10 June 1947.

[AG 300.7 (19 Feb 46)]

BY ORDER OF THE SECRETARY OF WAR:

OFFICIAL:

EDWARD F. WITSELL
Major General
The Adjutant General

DWIGHT D. EISENHOWER
Chief of Staff

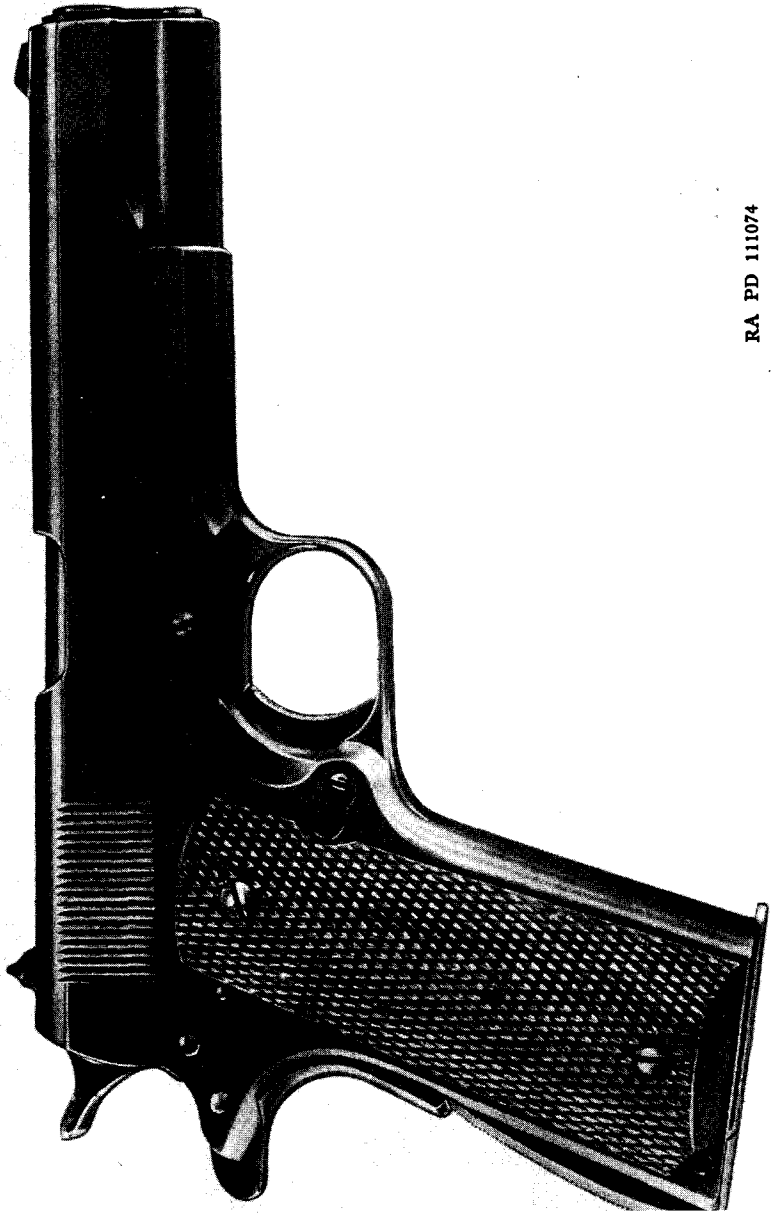
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For explanation of distribution formula, see TM 38-405.

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RA PD 111074

Figure 1. Right side of pistol M1911A1.

SECTION I

INTRODUCTION

1. Scope

This manual is published for the information and guidance of ordnance maintenance personnel. It contains instructions for inspection, disassembly, assembly, maintenance, and repair of the cal. .45 automatic pistol M1911 and M1911A1.

2. Characteristics

a. The cal. .45 automatic pistols M1911 and M1911A1 are recoil-operated, magazine-fed, self-loading hand weapons (figs. 1, 2, 3, and 4). These pistols have an inertia type firing pin and it is impossible for the firing pin to discharge or even touch the primer, except on receiving the blow of the hammer. The gas generated from a cartridge fired in either pistol is utilized to extract and eject the empty cartridge case, cock the hammer, and force the slide to the rearmost position, thereby compressing the recoil spring. The action of the recoil spring forces the slide forward, feeding a live cartridge from the magazine into the chamber. The weapon is again ready to fire.

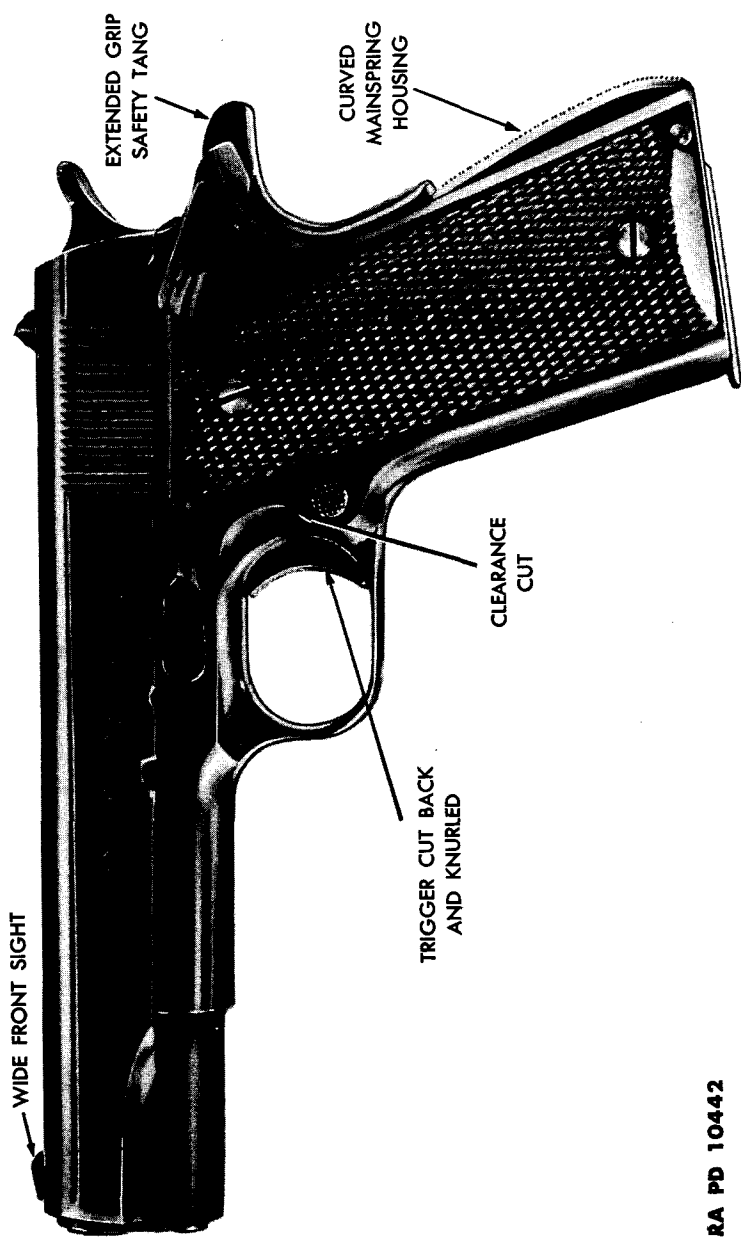
b. The pistols are designed to fire cartridge ball, cal. .45, M1911 ammunition. The magazine holds seven cartridges. The upper cartridge is stripped from the magazine and forced into the chamber by the forward motion of the slide. The pistols fire once at each squeeze of the trigger. When the last cartridge in the magazine has been fired, the slide remains open. The rate of fire is limited only by the ability of the operator to insert magazines and to squeeze the trigger.

3. Difference Between Models

The M1911A1 pistol is a modification of the M1911 pistol (figs. 2 and 4) but its operation is exactly the same; the differences do not affect maintenance. In the model M1911A1 the differences are:

a. The tang of the grip safety is extended to provide better protection for the hand (fig. 2).

b. A clearance cut is made on the receiver for the trigger finger.



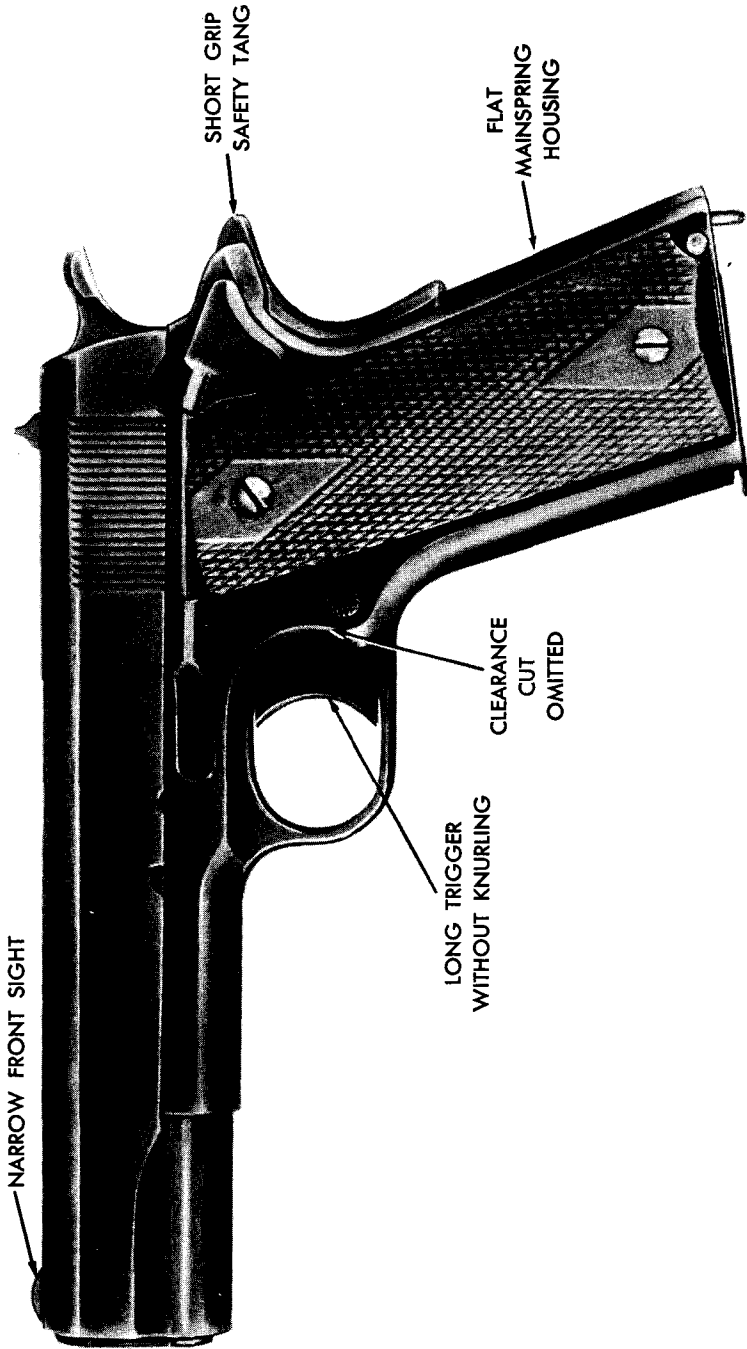
RA PD 10442

Figure 2. Left side of pistol M1911.41—showing exterior difference between pistol M1911 and M1911.41.



RA PD 10443

Figure 3. Right side of pistol M1911.



RA PD 10444

Figure 4. Left side of pistol M1911—showing exterior difference between pistol M1911 and M1911A1.

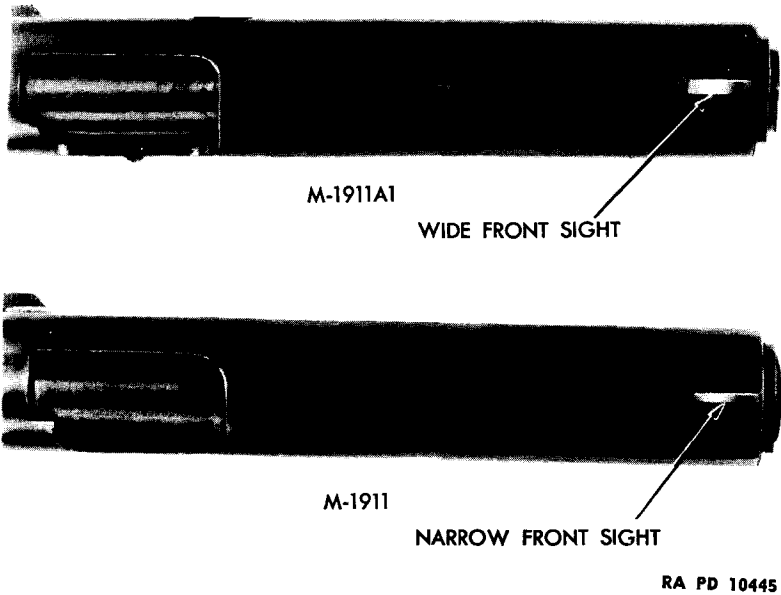


Figure 5. Top view of pistols M1911A1 and M1911—showing difference in width of sights.

- c. The face of the trigger is cut back and knurled.
- d. The mainspring housing is raised in the form of a curve to fit the palm of the hand and is knurled.
- e. The top of the front sight is widened (fig. 5).

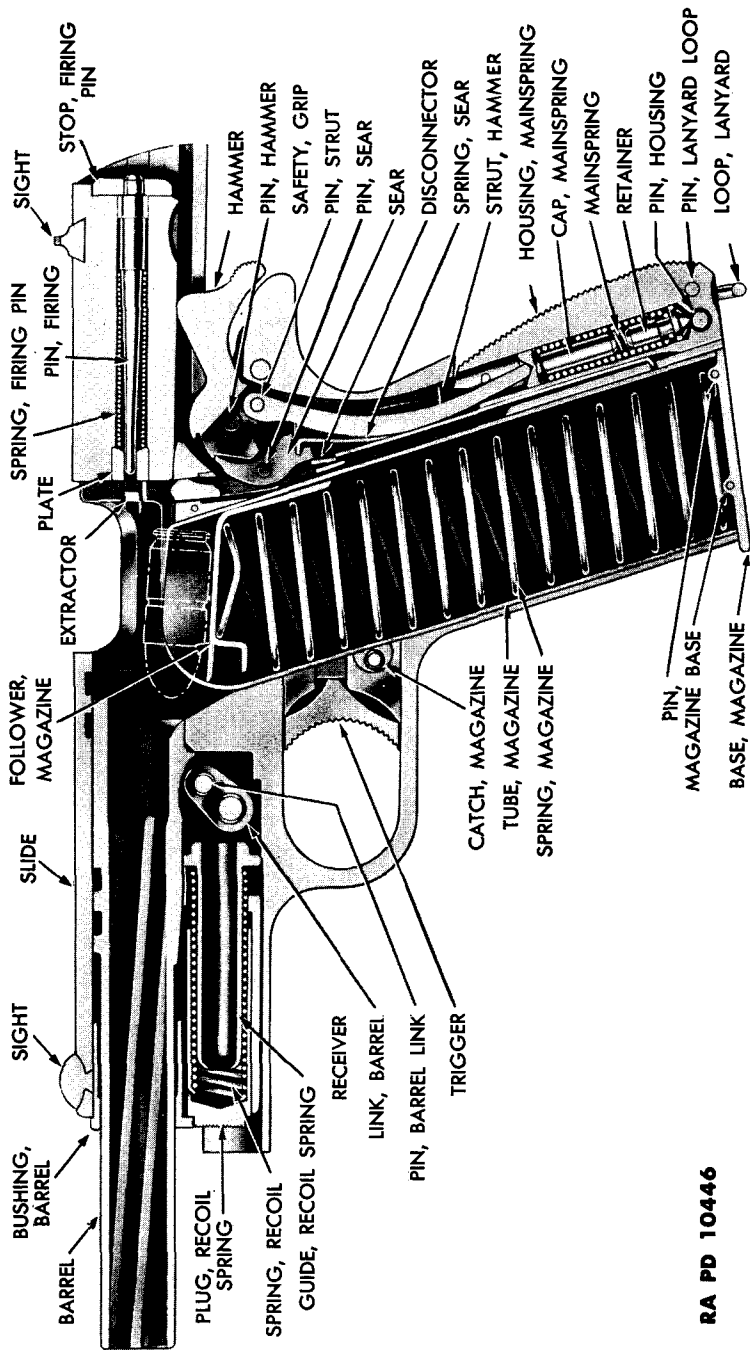
4. Forms and Records

- a. Use methods and forms outlined in TM 9-1100 for inspection and records.
- b. Ordnance inspection forms and records O. O. F. 7228 and 7229, Inspection of Ordnance Materiel, provide a written record of the status of ordnance materiel in respect to its serviceability. The records must be maintained at all times.

5. Data

a. WEIGHTS.

Weight of pistol with magazine (empty)	2.437 lb
Weight of loaded magazine, with 7 rounds (approximate)	0.481 lb
Weight of empty magazine	0.156 lb



RA PD 10446

Figure 6. Sectional view of pistol M1911A1.

b. TRIGGER PULL.

Pistols, new or repaired	5½ to 6½ lb
Pistols, in the hands of using arm'	5 to 6½ lb

c. BARRELS.

Caliber of bore	0.45 in.
Number of grooves	6
Length of barrel	5.03 in.
Length of rifling	(Min.) 4.118 in.
Rifling, L.H., 1 turn in	16 in.
Depth of grooves	0.003 in.

d. PISTOL, GENERAL.

Length (over-all)	8¾ in.
Cooling system	Air
Height of front sight above axis of bore	0.5575 in.
Sight radius	6.481 in.

e. BALLISTICS. For information concerning exterior ballistics, including accuracy, drift, velocity with striking energy, penetration, and trajectory flight of projectile, see FM 23-35.

f. SECTIONAL VIEW. See figure 6.

SECTION II

INSPECTION PRIOR TO DISASSEMBLY

6. General

Inspection prior to disassembly includes a careful visual inspection of the assembled pistol, trigger pull tests, and four safety tests. **CAUTION:** *When a pistol is received for repair be certain that the chamber is unloaded. It is possible that a cartridge has become jammed so that the pistol is in a dangerous condition when received. Proceed with caution when removing the damaged cartridge.*

7. Purpose

a. Inspection prior to disassembly is performed primarily to determine the serviceability of the weapon, general appearance, and the extent of repairs necessary to make the weapon serviceable. Important but secondary purposes are to determine the reason for incipient failure and whether proper care is being given to the materiel.

b. Serviceability, as interpreted in this section, is the ability of the weapon to function properly. In the event the materiel is found unserviceable or incipient failure is disclosed, determine the cause and extent of unserviceability. Correct any damage or wear and take corrective measures.

c. It is often desirable to determine the general condition of the weapon when complete disassembly is not possible.

8. Reports

a. Forward to the Chief of Ordnance, Field Service Division, Maintenance Branch, Washington, D. C., any suggested improvements in design, efficiency, and safety of operation or maintenance prompted by chronic failure or malfunction of the weapon, with all pertinent information necessary to initiate corrective action. This information should be reported on W.D., A.G.O. Form No. 468, Unsatisfactory Equipment Report. Such suggestions are encouraged so that other organizations may benefit thereby.

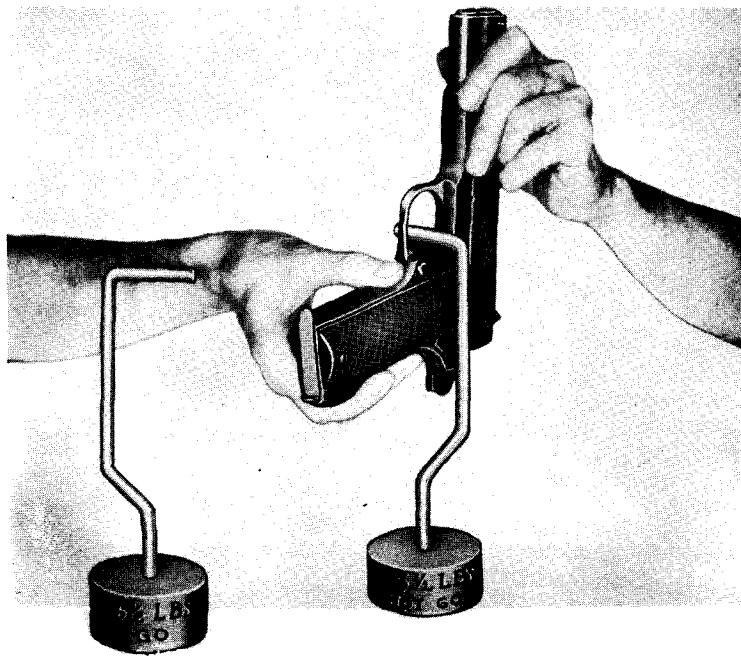


Figure 7. Trigger pull test.

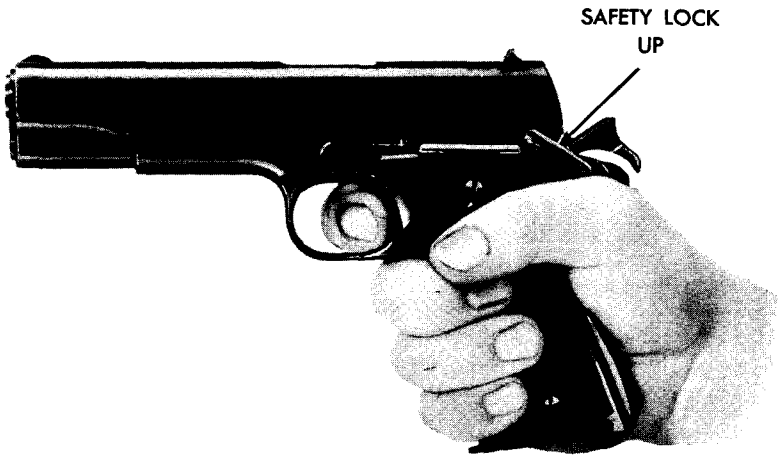
b. Report to the responsible officer any persistent carelessness or negligence in the observance of preventive maintenance procedures and safety precautions. Accompany the report with recommendations for correcting the unsatisfactory condition.

Note. The inspector's aim is not to criticize the using arm, but to be helpful.

9. Inspection of Weapon

a. **VISUAL INSPECTION.** Inspect the weapon, first as a unit for general appearance and condition, smoothness of operation, and functioning of the slide, extractor, ejector, and the magazine. Inspect for burs, dents, or rough spots on sights, slide, and receiver. Check the alinement of sights. Examine the weapon for split stocks, burred or missing stock screws, and worn checkering on stocks. The bore, chamber, top of magazine, side walls of slide, and surfaces of receiver which are exposed to action of gases should be examined for evidence of corrosion.

b. **TRIGGER PULL TEST.** Perform trigger pull test with magazine in weapon to determine the number of pounds trigger pull required to move the trigger causing the hammer to fall.



RA PD 10453

Figure 8. Pistol M1911A1, hammer back, safety lock upward in safe position, hand grasping stock so grip safety is depressed, finger squeezing trigger.



RA PD 10454

Figure 9. Pistol M1911A1, hammer cocked, grip safety not depressed, finger squeezing trigger.

(1) Cock the hammer, holding the pistol in the hand in a vertical position, and depress the grip safety (fig. 7).

(2) Place the 5½-pound weight in position on the trigger with the weight resting on the bench. Lift the pistol carefully. The weight should



RA PD 10485

Figure 10. Pistol M1911A1, hammer at half cock position notch, finger squeezing trigger.



RA PD 10456

Figure 11. Pistol M1911A1, hammer back nearly to full cock position, thumb slipping off hammer.

not cause the hammer to fall. If the hammer falls, the trigger pull is too light, and correction must be made (par. 25 b).

Note. For pistols in the hands of troops test with 5-pound weight (see serviceability chart fig. 20).

(3) Place the 6½-pound weight on the trigger with the weight resting on the bench. Lift the pistol carefully. The weight should cause the hammer to fall. If the hammer does not fall, correction must be made (par. 25 b).

(4) Pull the trigger several times to determine whether there is any excessive creep.

c. SAFETY TESTS. Perform the following safety tests on each pistol prior to disassembly:

(1) Safety Lock Test (fig. 8). With the pistol unloaded, cock the hammer and press the safety lock upward into the safe position. Grasp the stock so that the grip safety is depressed and squeeze the trigger tightly three or four times. If the hammer falls, the safety lock is not safe and must be replaced.

(2) Grip Safety Test (fig. 9). With the pistol unloaded, cock the hammer, and without depressing the grip safety, point the pistol downward and squeeze the trigger three or four times. If the hammer falls, or the grip safety is depressed by its own weight, the grip safety is not safe and must be replaced.

(3) Half Cock Position Test (fig. 10). With the pistol unloaded, draw back the hammer until the sear engages the half cock position notch. Then squeeze the trigger. If the hammer falls, the hammer or sear must be replaced or repaired. Draw the hammer back nearly to full cock position and then let it slip (fig. 11). The hammer should fall only to the half cock position, otherwise it must be replaced.



Figure 12. Pistol M1911A1, hammer cocked, slide partly back, finger squeezing trigger.

(4) Disconnecter Test (fig. 12). With the pistol unloaded, cock the hammer. Push the slide $\frac{1}{4}$ inch to the rear, and holding it in that position, squeeze the trigger. Let the slide go forward, maintaining pressure on the trigger. If the hammer falls, the disconnecter is worn on top and must be replaced. Pull the slide all the way to the rear and engage the slide stop. Squeeze the trigger and at the same time release the slide. The hammer should not fall. If it does, the disconnecter is faulty (fig. 13).



RA PD 10458

Figure 13. Pistol M1911A1, slide fully back, slide stop engaged, finger squeezing trigger, thumb releasing slide, hammer back.

Release the pressure on the trigger and then squeeze it. The hammer should then fall. If it does not, check the sear spring for weakness; if not weak, the disconnecter is faulty. The disconnecter normally prevents the release of the hammer unless the slide and barrel are in forward position, safely interlocked. This also prevents the firing of more than one shot at each squeeze of the trigger.

SECTION III

TOOLS, GAUGES, AND FIXTURES

10. General

The tools and gauges described and included in this section are requisitionable by echelon shops as designated.

11. Requisitionable Tools and Gauges

a. GAUGES. (1) There are no gauges requisitionable for use by field maintenance units.

(2) The gauges listed below are for base maintenance shop use, and are requisitionable from SNL B-20.

Gauge, snap, nonadjustable, not-go, .150 inch (barrel link pin), 41-G-339-150, A7319912 (fig. 14)	Used to check the diameter of the barrel link pin.
---	--

Gauge, snap, nonadjustable, not-go, .197 inch (slide stop pin), 41-G-339-160, A7319913 (fig. 14)	Used to check the diameter of the slide stop pin.
--	---

Gauge, snap, adjustable limit, not-go, .694 inch (barrel bushing), 41-G-336-400, A7319914 (fig. 14)	Used to check the outside diameter of the barrel bushing.
---	---

Gauge, plug, not-go, double purpose (barrel bushing), .582 and .587 inch (out-of-roundness), 41-G-254-393, A7319915 (fig. 14)	Used to check the inside diameter of the barrel bushing.
---	--

Gauge, plug, not-go, diameter .704 inch (barrel bushing seat), 41-G-254-391, A7319916 (fig. 14)	Used to check the inside diameter of the barrel bushing seat.
---	---

b. TOOLS. There is only one tool issued for the overhaul and repair of the cal. .45 automatic pistol M1911 and M1911A1. This tool is requisitionable from SNL B-6 for organizational field and base maintenance units.

Screwdriver, pistol, length over-all $3\frac{3}{8}$ inches, 41-S-1062-60, C64149 (fig. 28)	Used to disassemble and assemble the pistol.
--	--

12. Nonrequisitionable Tools, Weights, and Fixtures

Listed below are nonrequisitionable weights for checking the trigger pull on the cal. .45 automatic pistol M1911 and M1911A1, and nonrequisitionable tools for repair of parts. The weights alone are applicable to organizational; field, and base maintenance; the balance of these tools are intended for base maintenance use only.

Weights, trigger pull (fig. 15)

Used to check the trigger pull.

Tool, staking, plunger tube (fig. 16)

Used for staking the slide stop and safety plunger tube in the receiver.

Fixture, riveting, front sight (fig. 17)

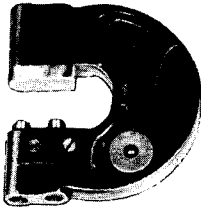
Used to rivet the front sight in place on the slide.

Tool, swaging, slide stop notch (fig. 18)

Used to decrease the size of an over-size or excessively worn slide stop notch in the receiver.

Tool, staking, bushing (fig. 19)

Used for staking the stock screw bushings in the receiver.



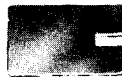
GAGE, SNAP, ADJUSTABLE
NOT-GO .694
41-G-336-400



GAGE, PLUG, NOT-GO
41-G-254-393



GAGE, PLUG, NOT-GO .704
41-G-254-391



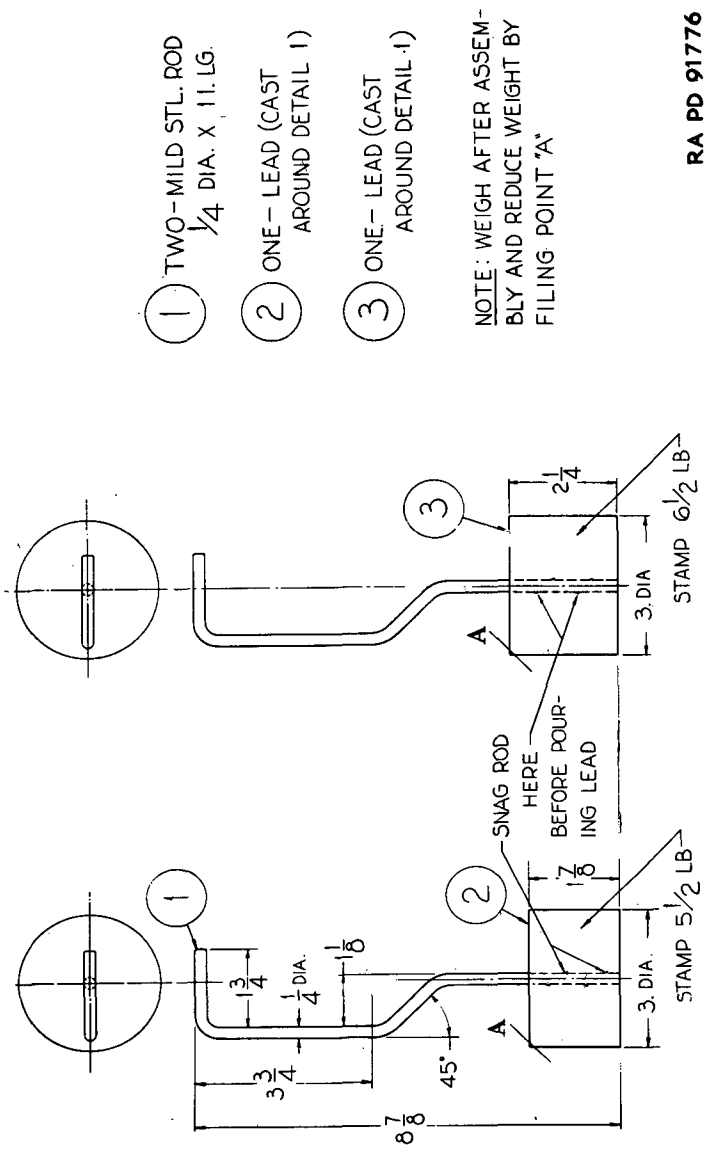
GAGE, SNAP, NOT-GO .197
41-G-339-160



GAGE, SNAP, NOT-GO
.150 41-G-339-150

RA PD 101821

Figure 14. Gauges for parts inspection.



RA PD 91776

Figure 15. Trigger pull weights.

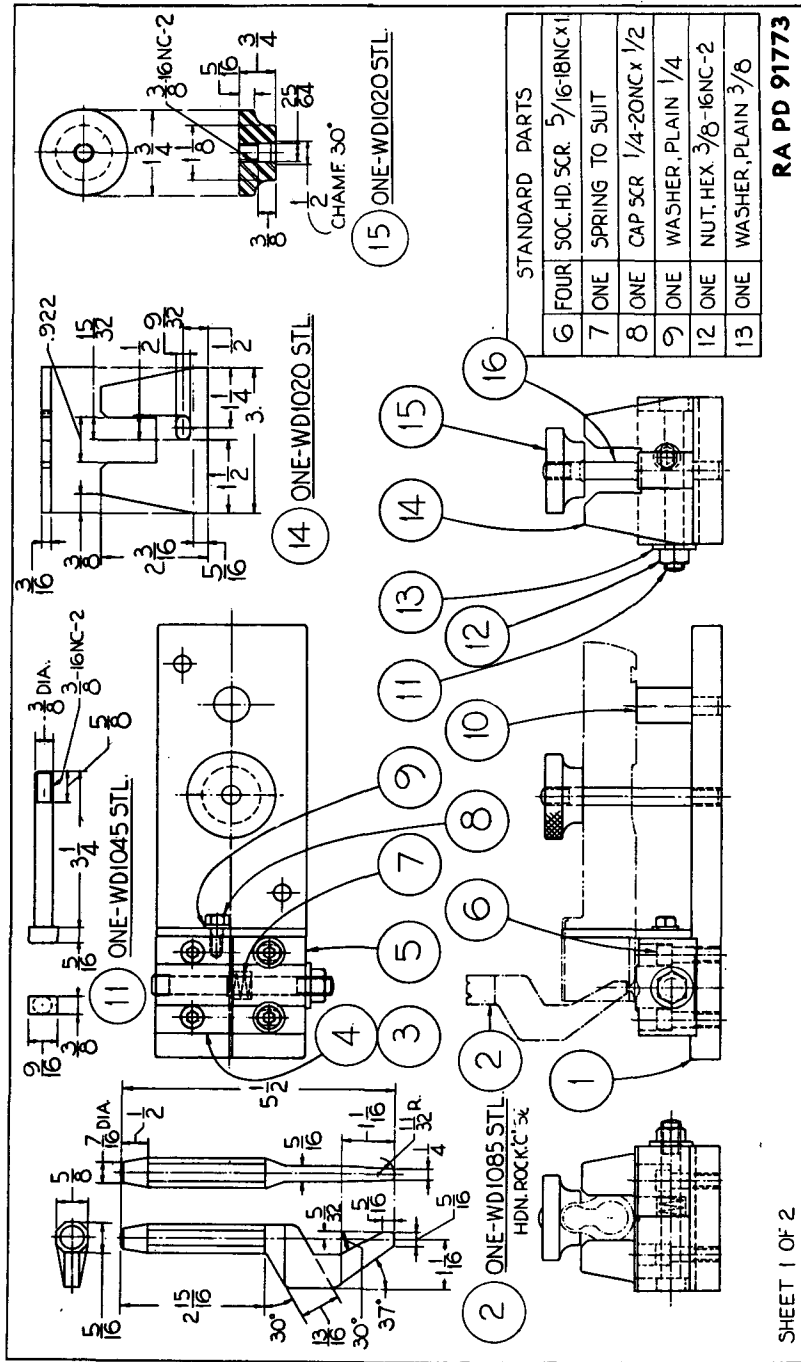


Figure 17. Fixture for riveting front sight.

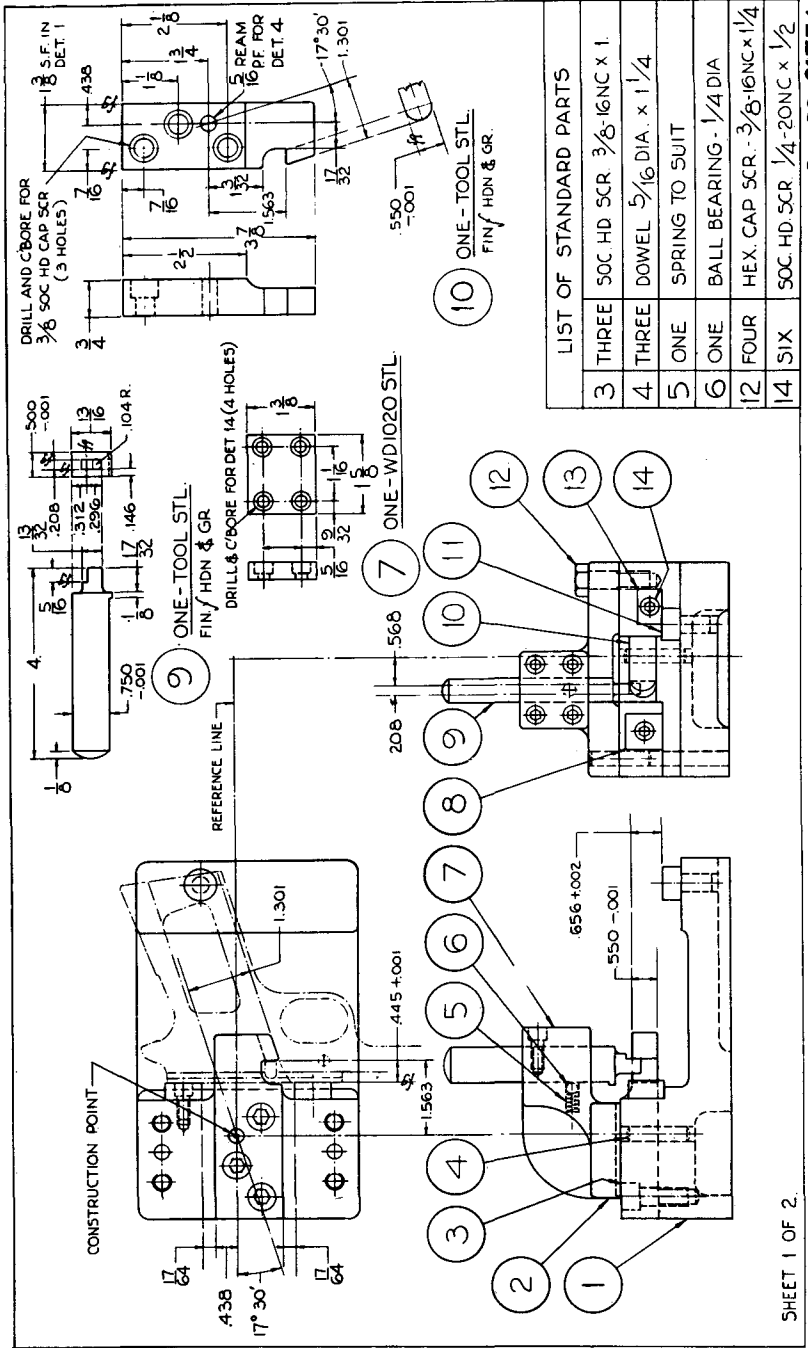
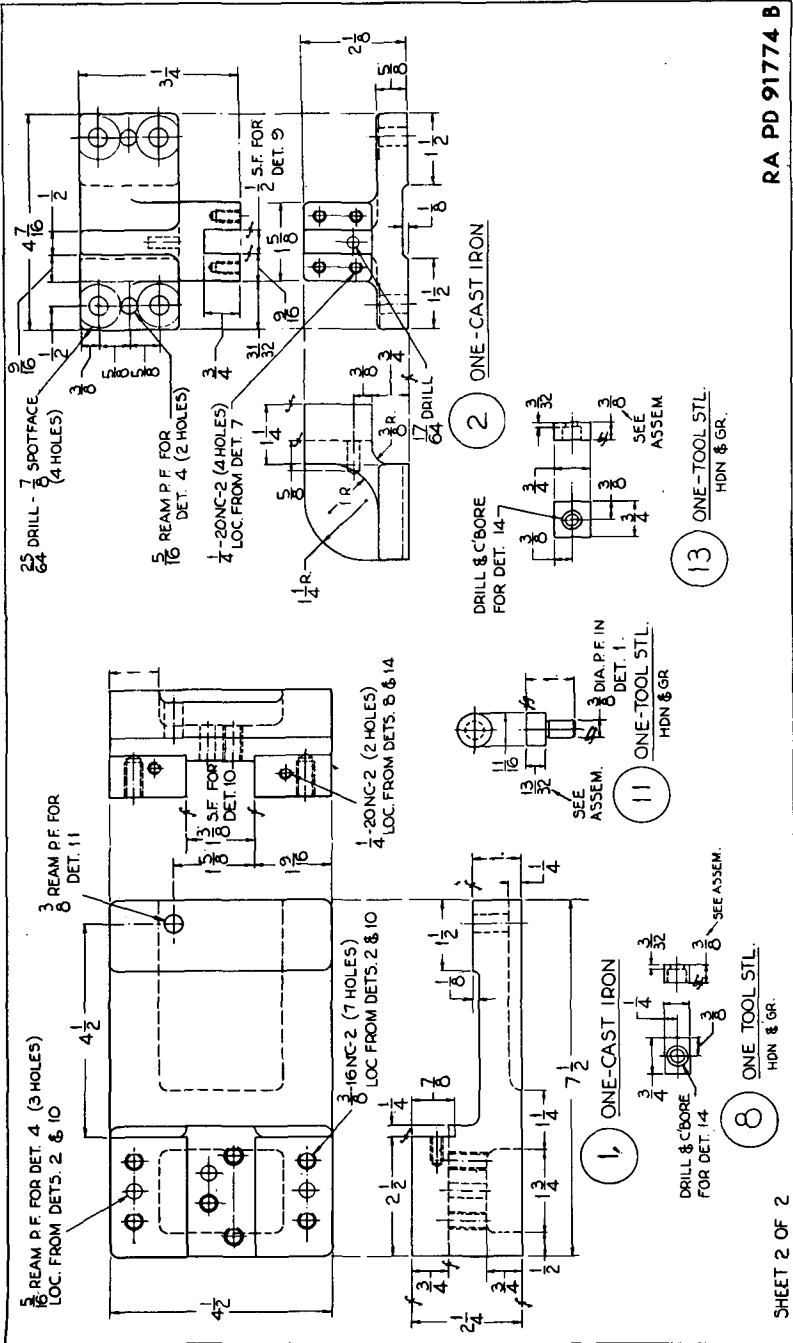
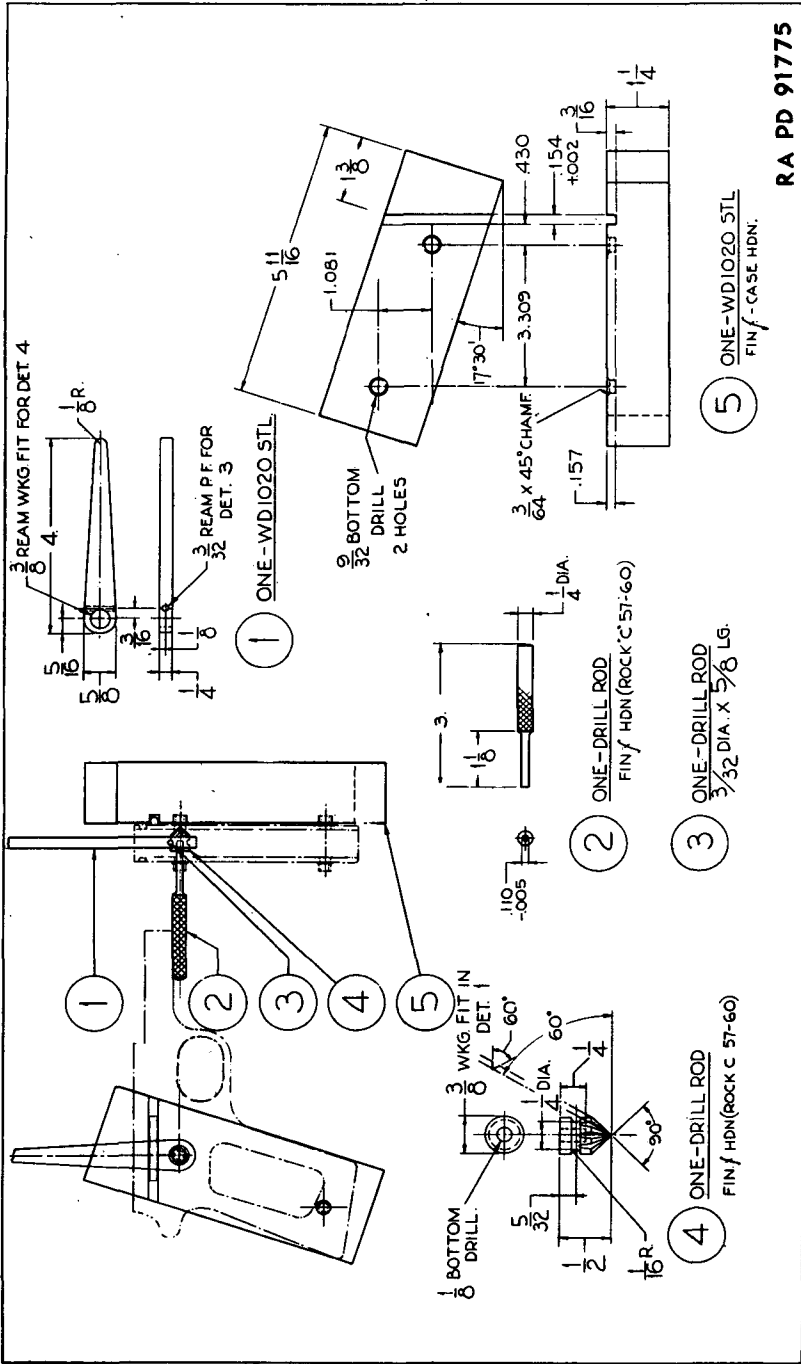


Figure 18. Tool for swaging slide stop notch.



RA PD 91774 B

Figure 18—Continued.



RA PD 91775

Figure 19. Tool for staking stock screw bushing.

SECTION IV

GENERAL MAINTENANCE

13. Scope

a. This manual contains information concerning the disassembly of the cal. .45 automatic pistol M1911 and M1911A1 into groups, replacement of worn or broken parts, rebuild of groups, and the assembly of the weapon.

b. The rebuild of groups is covered in separate sections.

c. A serviceability chart (fig. 20) may be used to aid in the determination of the extent of rebuild or repair necessary in relation to the destination of the weapons.

d. The rebuild flow chart (fig. 21) and rebuild route sheet (fig. 22) have been included as guides to determine the sequence of operations and to aid in handling large quantities of weapons.

14. Care and Cleaning

a. GENERAL. Instructions for care, preservation, and lubrication are found in FM 23-35. Cleaning and lubricating materials are listed in WD Cat ORD 3 SNL K-1, and instructions for their use are found in TM 9-850.

b. Carefully clean rust preventives from matériel received from storage. Keep parts or assemblies oiled between operations to prevent corrosion.

15. Allocation of Maintenance Responsibilities

Maintenance performed by field units consists of disassembly, removing burs, stoning and replacement of parts, cleaning, lubricating, and assembly of the weapon. Maintenance performed by base units consists of disassembly, rebuild, replacement, fitting of parts, refinishing, and assembly of the weapon. The plug and snap gauges are confined to base maintenance.

16. General Process

Observe carefully the procedures outlined below when rebuilding or repair is performed.

a. Thoroughly clean and inspect the following listed parts which are most subject to wear or breakage:

Sear spring	Hammer pin	Firing pin
Sear	Hammer strut	Trigger
Disconnecter	Hammer	Receiver
Sear pin	Extractors	Slide
		Firing pin stop

b. Remove all burrs, without altering the shape or dimension of the parts, by stoning.

c. Rebuild and repair of the weapon consist mainly of the replacement of worn or broken parts as determined by a very thorough inspection, functional check, and fitting of new parts.

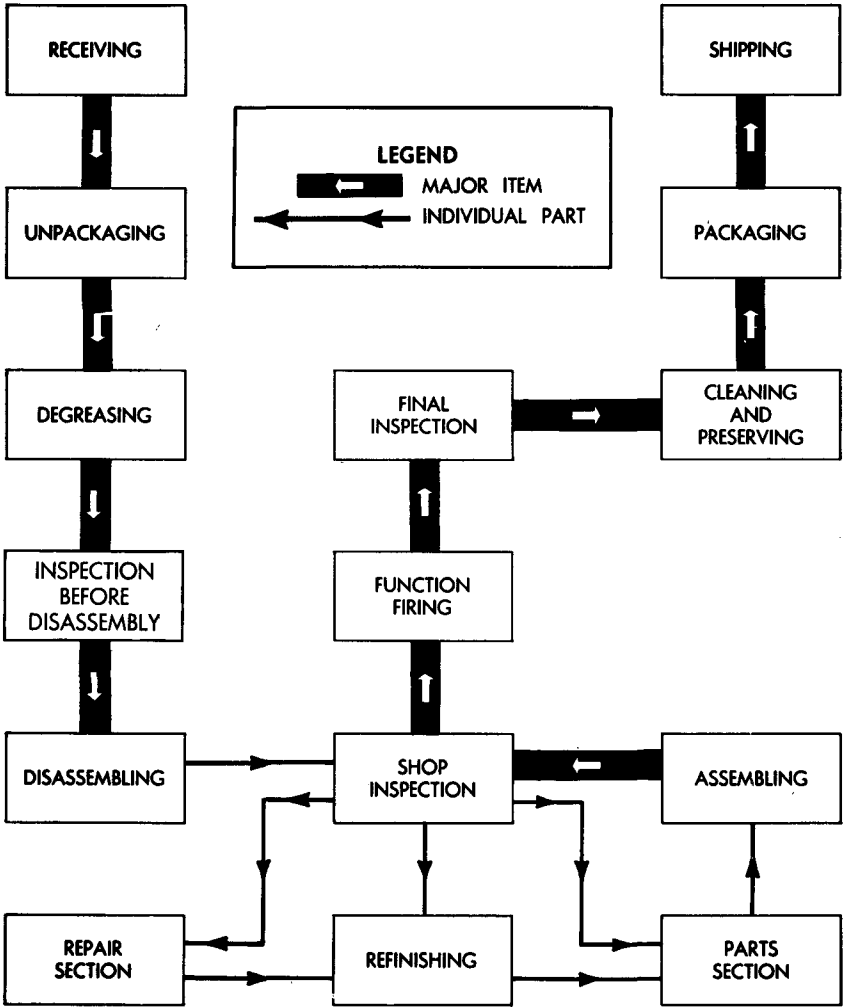
d. Part numbers and nomenclature appearing in this manual are for identification purposes only. Consult WD Catalog ORD 8 SNL B-6 when requisitioning parts or tools.

SERVICEABILITY CHART---PISTOL, CAL. .45, M1911 AND 1911A1			
ITEM	IN THE HANDS OF TROOPS	TO ACCOMPANY TROOPS OVERSEAS	TO BE PLACED IN STORAGE FOR REISSUE
FINISH	Exposed surfaces should be dull enough to prevent glare.	Intact enough to prevent glare.	Approximate new finish.
BORE	Pitting less than the width of land or groove and less than 3/8" long is acceptable.	Fine uniform pitting, but with sharp lands, is acceptable.	A few fine pits, but with sharp lands, are acceptable
TRIGGER PULL	Min. 5 lb. Max. 6 1/2 lb.	Min. 5 1/2 lb. Max. 6 1/2 lb.	Min 5 1/2 lb Max. 6 1/2 lb

RA PD 91803

Figure 20. Serviceability chart.

PISTOL, CAL. .45, M1911 AND M1911A1



RA PD 101822

Figure 21. Rebuild flow chart.

PISTOL, CAL. .45, M1911 AND M1911A1			
OPER. NO.	OPERATION	FIXTURE	TOOLS
1	Unpack		
2	Check chamber for live round		
3	Degrease pistols.....	vapor degreaser	
4	Record serial numbers		
5	Inspect and segregate Class "A" pistols		
6	Dismantle into groups		
7	Disassemble slide group		
8	Disassemble receiver group		
9	Disassemble magazine group		
10	Forward parts to inspection		
11	Forward parts to repair section		
12	Forward parts to refinishing department		
13	Assemble slide group		
14	Assemble receiver group		
15	Assemble magazine group		
16	Assemble pistol		
17	Forward assembled pistols to inspection department		
18	Inspect pistol for completeness and functioning		
19	Function fire pistol		
20	Clean pistol		
21	Final inspection		
22	Record serial numbers		
23	Apply preservative.....	* vat	
24	Package		
25	Ship or store pistol		
* Indirectly heated vat for preservative compound			

Figure 22. Rebuild route sheet.

SECTION V

DISASSEMBLY OF PISTOL

17. Disassembly

a. Press the magazine catch and remove the magazine (fig. 23).

b. Push the recoil spring plug inward and turn the barrel bushing clockwise until the recoil spring plug and the end of the recoil spring protrude from their seat. Keep the finger and thumb over the recoil spring plug while releasing the spring tension, so that the spring and plug will not fly out and become lost or cause injury (fig. 24).

c. Draw the slide rearward until the middle notch in the slide aligns with the projection on the thumb piece of the slide stop (fig. 25). Push against the pin part of slide stop which protrudes from the opposite side of the receiver just above the trigger guard (fig. 26). Pull the slide stop from the receiver from the left side (fig. 25). The barrel link is now disconnected, allowing the barrel, link, and slide assembly to be drawn forward from the receiver (fig. 23).

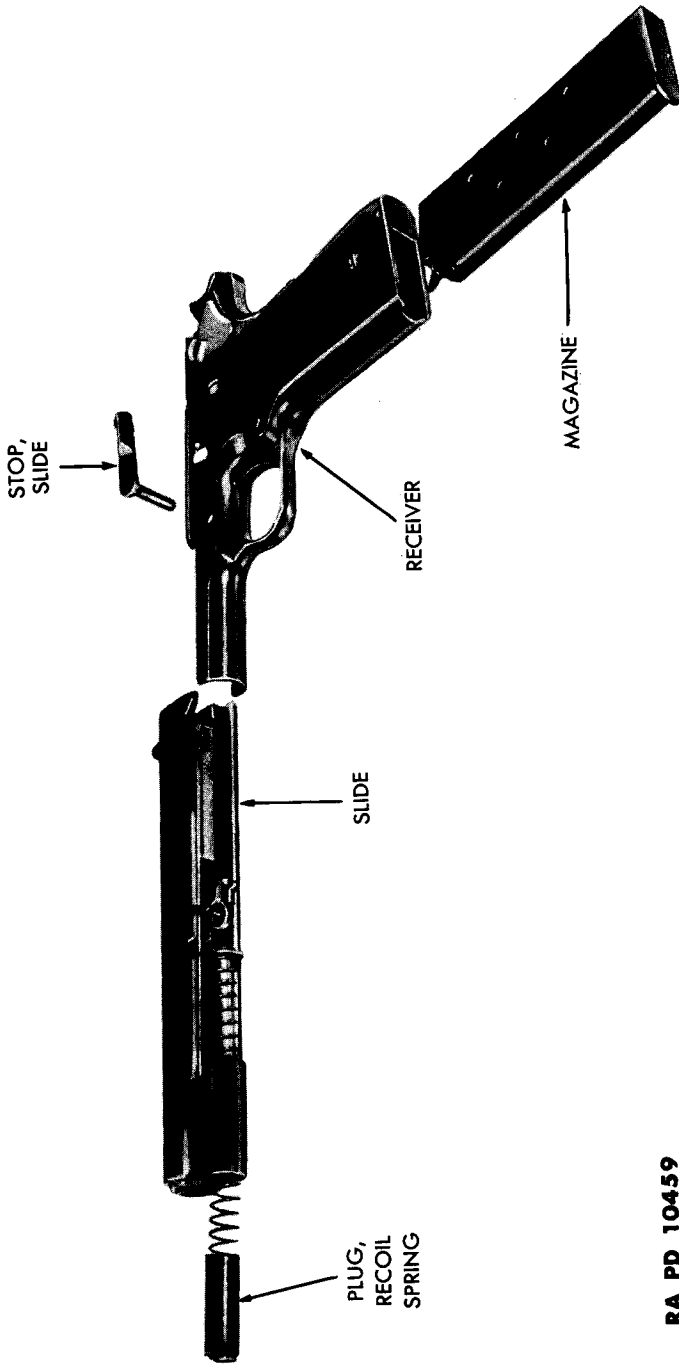


Figure 23. Subassemblies of pistol M1911A1.

RA PD 10459



RA PD 10463

Figure 24. Removing recoil spring plug from pistol M1911A1.



RA PD 10464

Figure 25. Lining up slide stop of pistol M1911A1.



RA PD 111075

Figure 26. Removing slide stop pin from pistol M1911A1.

SECTION VI

SLIDE GROUP

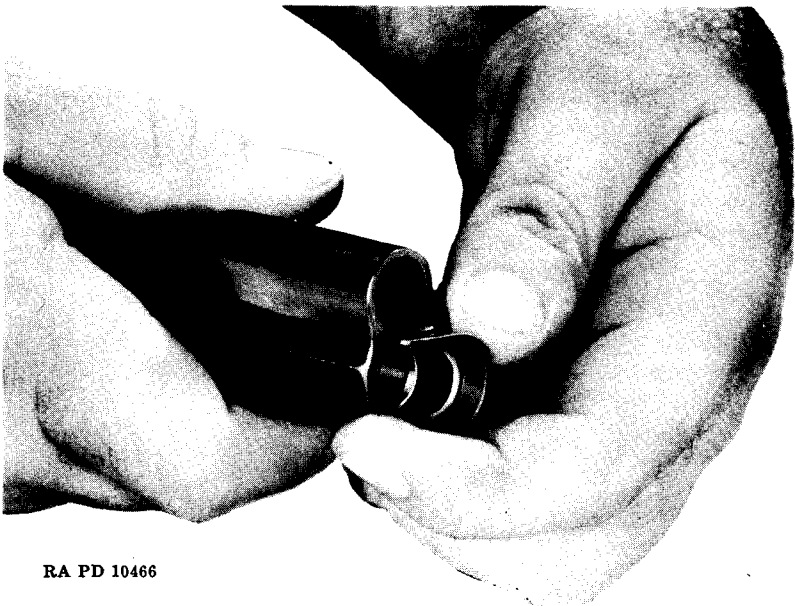
18. Disassembly

a. Twist the recoil spring plug slightly clockwise holding the weapon in the left hand and withdraw from the recoil spring. Pull the spring and guide from the slide.

b. Turn the barrel bushing counterclockwise and remove from the slide (fig. 27). The barrel and the barrel link are then drawn forward from the slide. Push out the barrel link pin, releasing the barrel link from the barrel.

c. Using a small punch, push the rear end of the firing pin forward until it clears the firing pin stop (fig. 28). Withdraw the stop downward from its seat in the slide. Remove the firing pin and spring from the slide (fig. 29). NOTE: *Keep the finger and thumb over the firing pin, so that it will not fly out when withdrawing the stop.*

d. Pry the extractor out of the slide at the rear with a punch or screwdriver (fig. 30).



RA PD 10466

Figure 27. Removing barrel bushing.



RA PD 91165

Figure 28. Removing firing pin stop.

19. Inspection

a. Inspect the barrel for burs on the exterior and interior rim of the muzzle (fig. 31). Inspect the barrel for pitting, bulges, and sharpness of the lands (figs. 32, 33, and 34). Check the barrel link pin with non-adjustable .150 inch snap gauge (fig. 35).

b. Inspect the barrel bushing for burs and excessive wear. Check the outside diameter of the bushing with adjustable limit snap gauge (fig. 36). Check the inside diameter of the bushing with double purpose plug gauge (fig. 37).

c. Inspect slide for breaks or cracks, especially around the ejector port. Use magnaflux equipment if available. Inspect the interior grooves and ejector port of slide for excessive wear and burs. Check the barrel bushing seat with the plug gauge (diameter .704) (fig. 38). Check the slide stop pin with nonadjustable snap gauge (.197) (fig. 39). Check for loose front or rear sights.

d. Inspect the firing pin for excessive wear or shortness (fig. 40). The pin as manufactured has an over-all length of 2.290 to 2.296 inches. Inspect the firing pin spring for weakness or breakage.

e. Inspect the recoil spring for weakness or breakage. Specifications for new springs require that they carry a load of 8 pounds ± 0.50 pound

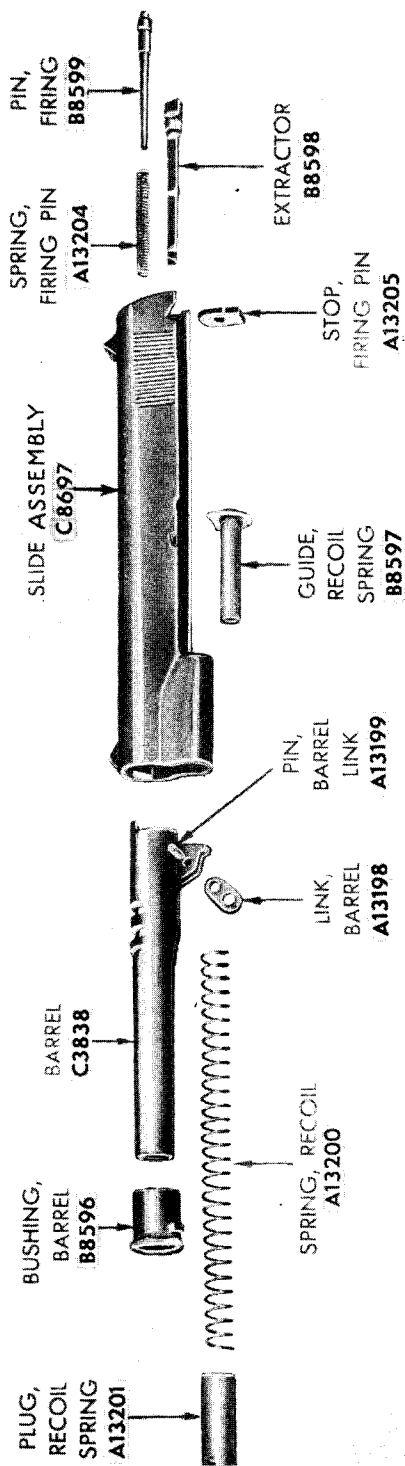


Figure 29. Slide group of pistol M1911A1—exploded view.

RA PD 91025

compressed to 3.72 inches and carry a load of 13.55 pounds ± 0.60 pound compressed to 1.81 inches (fig. 40). The free length of spring should be approximately $6\frac{1}{2}$ inches.

f. Examine the extractor for excessive wear, weakness, broken lip, or deformation (fig. 40).

g. Inspect the recoil spring plug, recoil spring guide, and firing pin stop for burs or damage.



Figure 30. Removing extractor from slide.

RA PD 91799

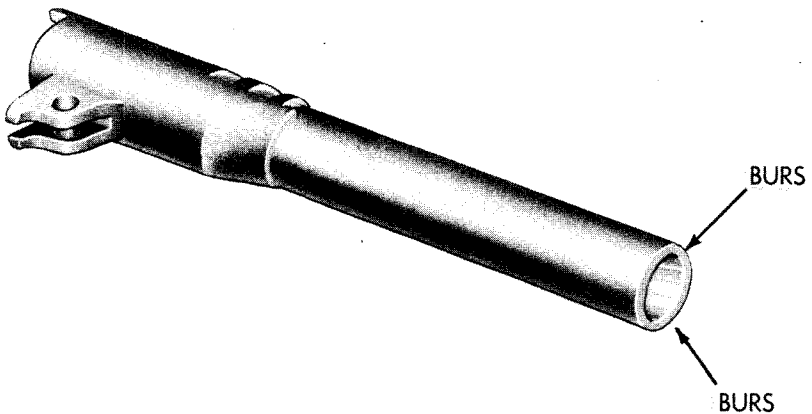


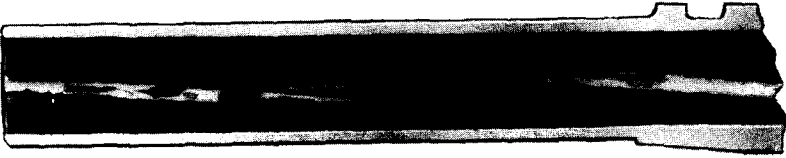
Figure 31. Muzzle end of barrel—showing points to be inspected.

RA PD 91396



RA PD 10475

Figure 32. Interior of barrel—showing slight pitting (but free from bulges) and sharp lands.



RA PD 10476

Figure 33. Interior of barrel—showing pitting and dull lands.



RA PD 10477

Figure 34. Interior of barrel—showing pitting, worn lands, and burrs on interior of muzzle.



RA PD 91140

Figure 35. Checking barrel link pin.

20. Maintenance and Repair (Field Maintenance)

Maintenance and repair performed by the third and fourth echelons consist of cleaning, lubricating, removal of burrs, and replacement of broken or excessively worn parts of the slide group.

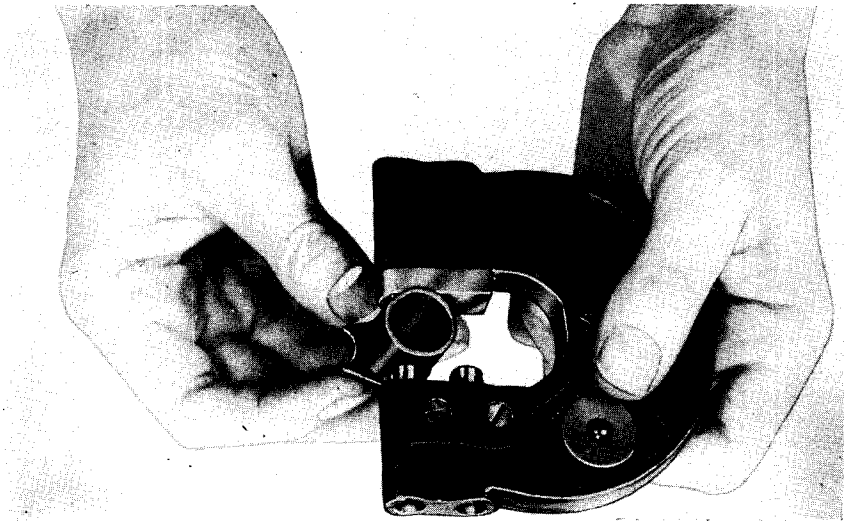
21. Maintenance and Repair (Base Maintenance)

Maintenance and repair, performed by base maintenance shops, consist of cleaning, lubricating, replacing, and fitting parts of the slide group. Tighten loose front sight on the slide by riveting (fig. 41). Base maintenance shops also apply first and second grade black phosphate finish to parts of this assembly. Refer to TM 9-1861 on operation and maintenance of black finishing equipment for ferrous metals.

22. Assembly

a. Insert the firing pin spring, firing pin, and extractor into the rear of the slide. Push the firing pin forward until it clears the firing pin stop position and insert the firing pin stop (fig. 28). Be certain the extractor is aligned correctly to allow the firing pin stop to enter its recess. The rounded top edge of the rear of extractor matches the curve on the rear surface of the slide.

b. Place the barrel link in position in the barrel lugs and insert the barrel link pin. Insert the barrel in the slide from the forward end. Place the barrel bushing on the barrel; then insert it into the slide and turn clockwise until it locks the barrel into the slide.



RA PD 91788

Figure 36. Checking outside diameter of barrel bushing.

c. Hold the recoil spring guide in position in the slide and place the recoil spring through the opening in the slide and over the guide. To complete assembly of the group, install plug to outward end of spring by giving it a twist to catch the spring under the lug in plug (fig. 42).

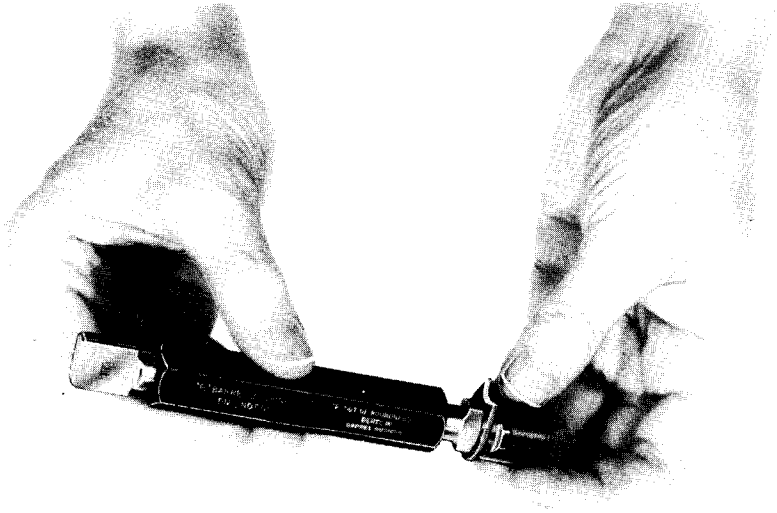


Figure 37. Checking inside diameter of barrel bushing.

RA PD 91138

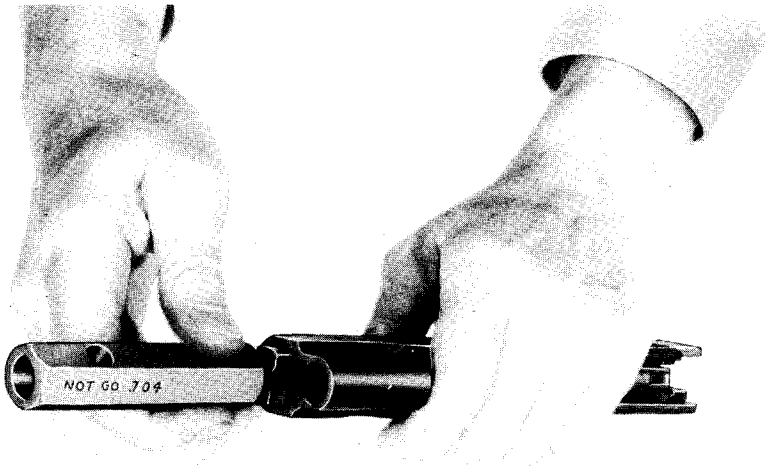


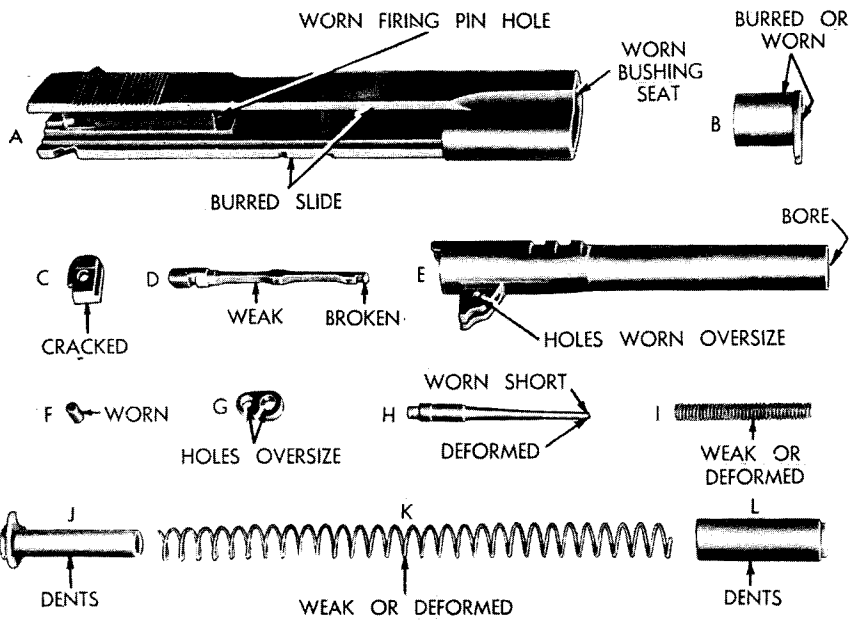
Figure 38. Checking barrel bushing seat.

RA PD 91781



RA PD 91221

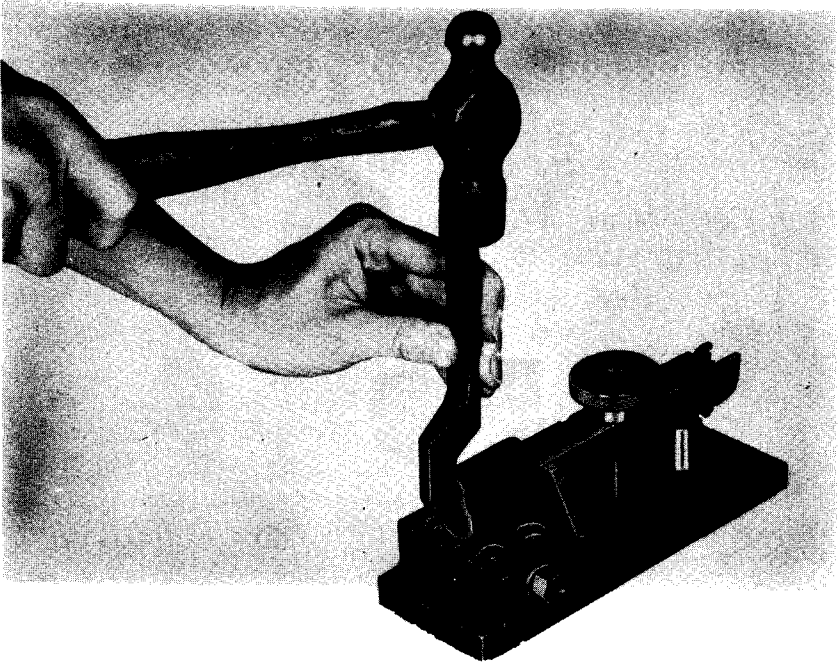
Figure 39. Checking slide stop pin.



- | | | | |
|------------------|-------------|-----------------|-----------------|
| A—SLIDE ASSEMBLY | D—EXTRACTOR | G—LINK | J—GUIDE |
| B—BUSHING | E—BARREL | H—FIRING PIN | K—RECOIL SPRING |
| C—STOP | F—LINK PIN | I—FIRING SPRING | L—PLUG |

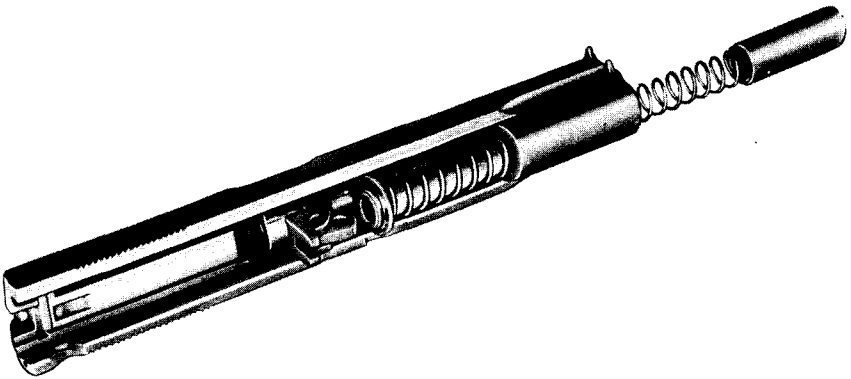
RA PD 91797

Figure 40. Points to be inspected on slide group parts.



RA PD 91787

Figure 41. Riveting front sight on slide.



RA PD 91789

Figure 42. Slide group assembly.

SECTION VII

RECEIVER GROUP

23. Disassembly

- a. Remove the stock screws and stocks from the receiver (fig. 51).
- b. Cock the hammer. Move the safety lock to a point midway between upper and lower positions, and withdraw the lock from the receiver (fig. 43).
- c. Squeeze the trigger allowing the hammer to fall to fired position. Drive out the mainspring housing pin by tapping on the recessed side of the pin (fig. 44). Slide the mainspring housing from the lower end of the receiver. The grip safety is now released and removed.
- d. Lift the sear spring from the receiver (fig. 56).
- e. Push the hammer pin from the hammer and receiver from the right side, releasing the hammer and hammer strut (fig. 51).



RA PD 10467

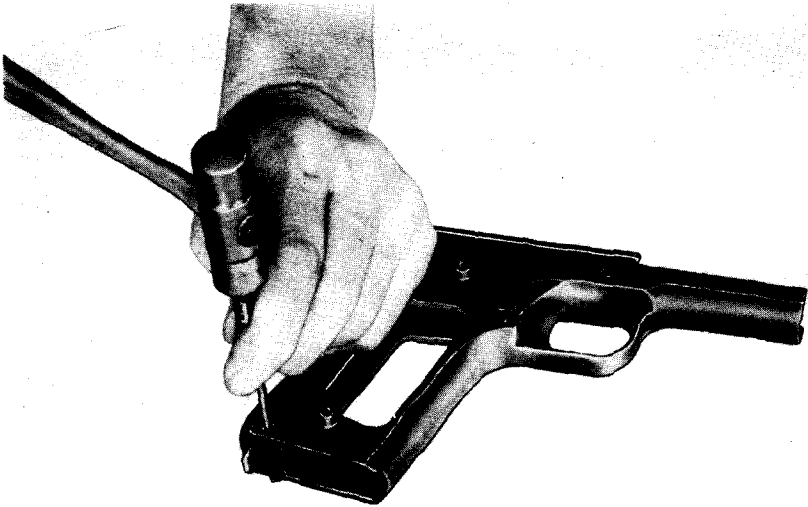
Figure 43. Removing safety lock.

f. Push the sear pin from the right side, releasing the sear and disconnect (fig. 55). Remove the sear and disconnect.

g. Remove the new design magazine catch, by pushing the catch inward and turning the magazine catch lock one-quarter turn counterclockwise with a screwdriver (fig. 45). Remove the old design magazine catch by pushing the catch inward and turning the lock counterclockwise one-half turn with a small wrench (fig. 46). The magazine catch and lock are removed as a unit. The new design is recognized by the screwdriver slot in the catch lock (fig. 45).

h. Remove the trigger by sliding it through the receiver to the rear (fig. 51).

i. Remove the slide stop plunger, spring, and safety lock plunger by pushing rearward out of the tube (fig. 47).



RA PD 91796

Figure 44. Removing mainspring housing pin.

j. Remove the mainspring, mainspring cap, and retainer from the mainspring housing by tapping the mainspring cap pin from the housing with a drift.

Caution: Hold the thumb over the mainspring cap while removing the pin to prevent the assembly from flying out, thereby causing injury, or loss of parts.

k. Drive the lanyard loop pin out of the mainspring housing with a drift of the proper size. Pull the lanyard loop from the housing.

l. When ejector is too loose, or requires replacement, drive the ejector



RA PD 91785

Figure 45. Disassembling new design magazine catch from receiver

pin from the receiver and ejector with a drift of the proper size if the ejector must be removed.

m. If necessary, remove the slide stop and safety lock plunger housing by driving on peened pin sections of the housing on the inside of the receiver.



RA PD 10468

Figure 46. Disassembling old design magazine catch from receiver.



RA PD 91784

Figure 47. Removing slide stop and safety lock plunger assembly.

24. Inspection

a. Inspect the receiver housing (fig. 48) for excessive wear or burrs in slide mating grooves. Inspect the receiver for deformation. Check to see that the plunger tube, ejector, and stock screw bushings are not loose, burred, or excessively worn. Check the mainspring housing mating grooves in the receiver for burrs. Inspect the trigger groove for burrs or excessive wear. Check the slide stop notch for oversize or excessive wear (fig. 48).

b. Inspect the half cock position notch and the firing notch on the hammer for cracks, chips, or excessive wear. Be certain that the hammer strut is not bent or cracked (fig. 49).

c. Inspect the sear for worn or chipped tip, or excessively worn lugs (fig. 49).

d. Inspect the sear spring for broken leaves and tension (fig. 49).

e. Inspect the disconnecter for burrs or excessive wear (fig. 49).

f. Inspect the trigger for burrs and deformation (fig. 49).

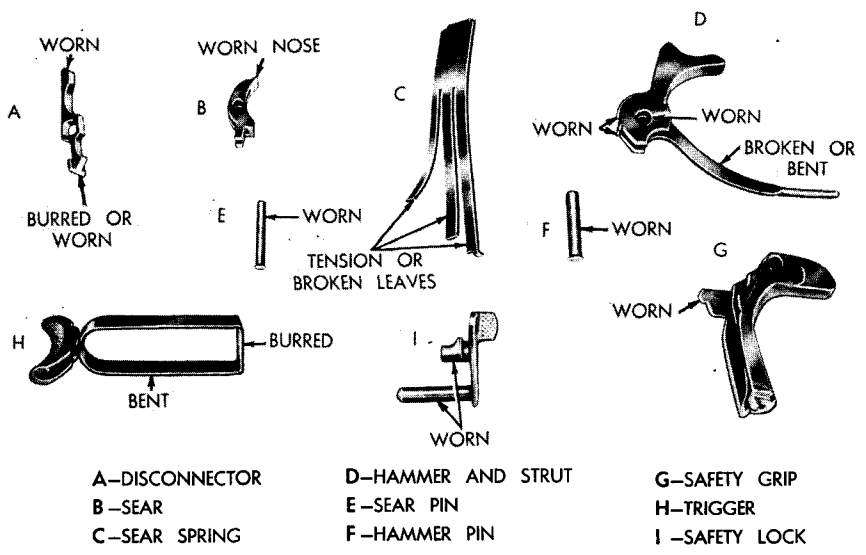
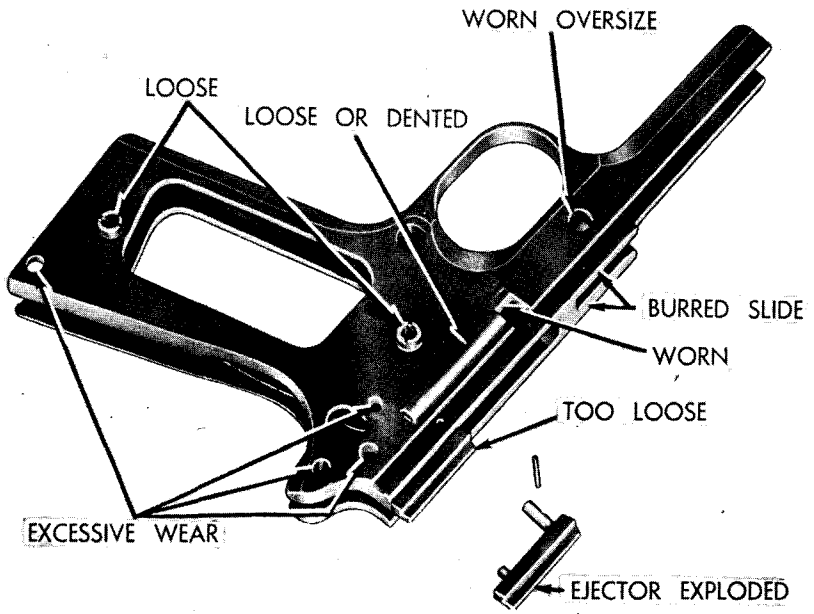
g. Inspect the safety grip for burrs and excessive wear, or cracks on the tip which engages the trigger (fig. 49).

h. Inspect the mainspring for weakness or breakage (fig. 50).

i. Inspect the mainspring cap, housing pin retainer, and housing pin for excessive wear (fig. 50).

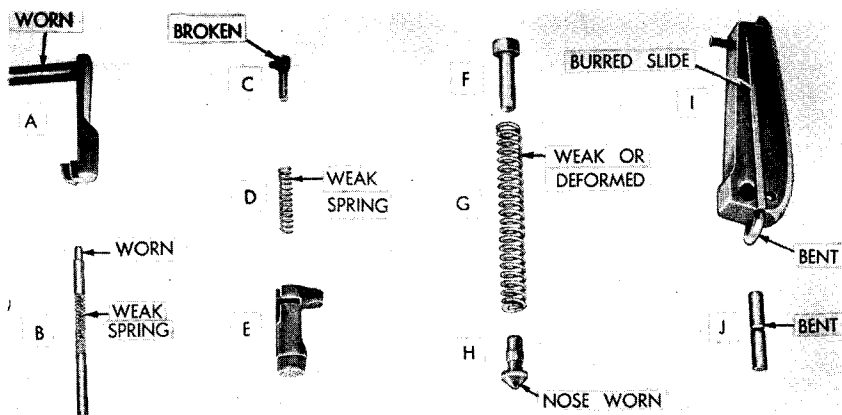
j. Inspect mainspring housing for burrs on mating surfaces (fig. 50).

k. Inspect the stocks for cracks or worn checkering.



RA PD 91800

Figure 49. Important points to be inspected on receiver group parts.



A—SLIDE STOP B—PLUNGER, ASSEMBLY C,D,E—LOCK, SPRING AND MAGAZINE CATCH
 F,G,H—CAP, SPRING AND RETAINER I—MAINSRING HOUSING J—PIN

RA PD 91790

Figure 50. Important points to be inspected on receiver group parts.

25. Maintenance and Repair (Field and Base Maintenance)

a. GENERAL. Maintenance and repair performed by field and base maintenance units consist of removing burs by stoning, and replacement of excessively worn or damaged parts.

b. TRIGGER PULL. A too heavy or too light trigger pull may be corrected by selective assembly of sear and hammers. In some instances the mating surfaces of the sear and hammer may be stoned until they meet squarely. Extreme care should be used as stoning the hammer at an angle may decrease the safety of the weapon.

26. Maintenance and Repair (Base Maintenance)

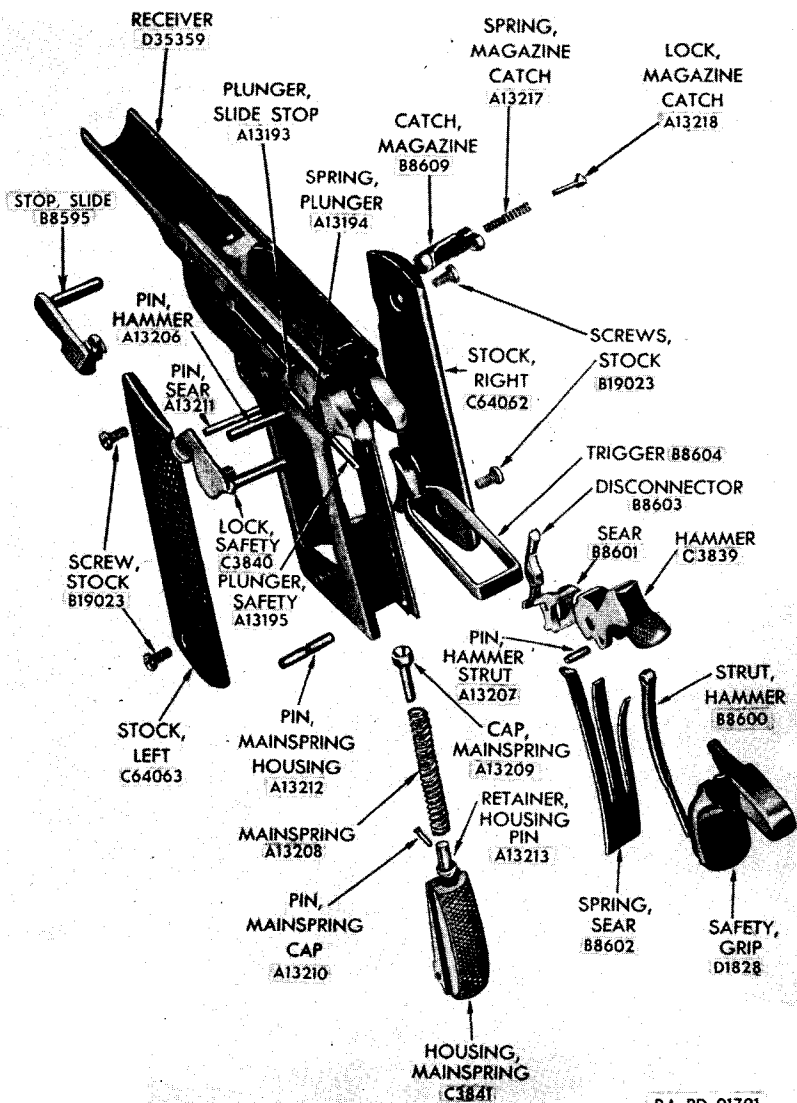
a. Maintenance and repair performed by base maintenance shops consist of operations described in paragraph 25 with the addition of the following:

- (1) When ejector has been removed, replace on the receiver (fig. 48).
- (2) Replace and/or tighten the stock screw bushings (fig. 52).
- (3) Replace and stake the slide stop plunger tube (fig. 53).
- (4) Swage the slide stop notch in the receiver when it is excessively worn (fig. 54).

b. Refinish parts of this assembly with first and second grade black phosphate finish. Refer to TM 9-1861 on operation and maintenance of black finishing equipment for ferrous metals.

27. Assembly

a. Install the lanyard loop in the mainspring housing and secure with the lanyard loop pin. Place the mainspring housing in a vise with copper jaws. Install the housing pin retainer, mainspring, and mainspring cap into the housing in the order named. Compress the spring and install the mainspring cap pin. NOTE: Do not install the assembly into the receiver at this time.



RA PD 91791

Figure 51. Receiver group of pistol M1911A1—exploded view.

b. Install the slide stop plunger housing if it has been removed. Slide the slide stop plunger, spring, and safety lock plunger into the housing from the rear of the receiver (fig. 47).

c. Slide the trigger into receiver from the rear. Install the new design magazine catch from the right side of the receiver and turn the catch cock one-quarter turn clockwise with a screwdriver. If the old design is installed in a M1911 pistol, install the catch, press inward and turn the cock one-half turn clockwise with a wrench.

d. Place the cylindrical part of disconnector up through its opening in the receiver, with the flat face of the lower part against the trigger yoke (fig. 55). Place the sear, lugs downward, so that it straddles the disconnector. Squeeze the trigger slightly to aline the holes and insert the sear pin from the left side so that it passes through both the sear and disconnector.

e. Position the hammer with the strut installed and secure with the hammer pin installed from the left side.

f. Place the hammer in fired position and rotate the strut upward. Install the sear spring with the lower end in the slot in the receiver and the end of the long leaf resting on the sear (fig. 56). Rotate the hammer strut downward over the sear spring.

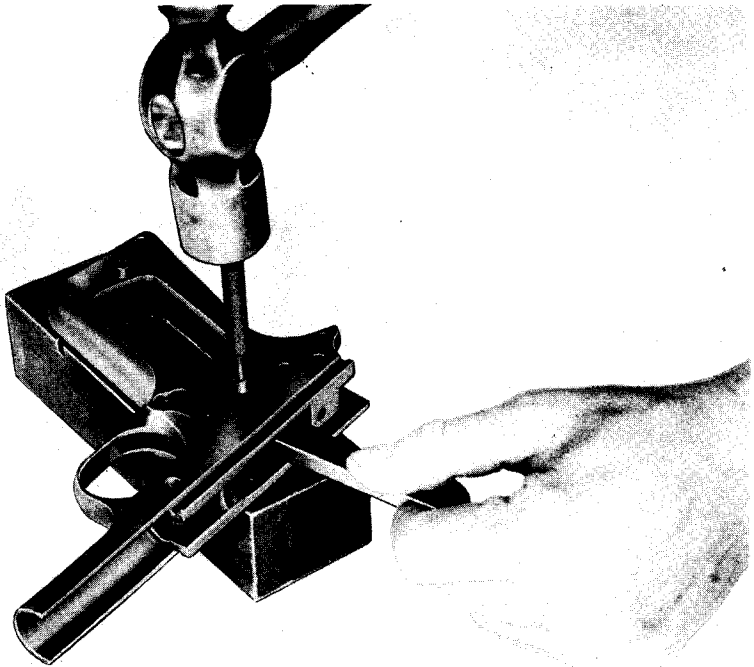
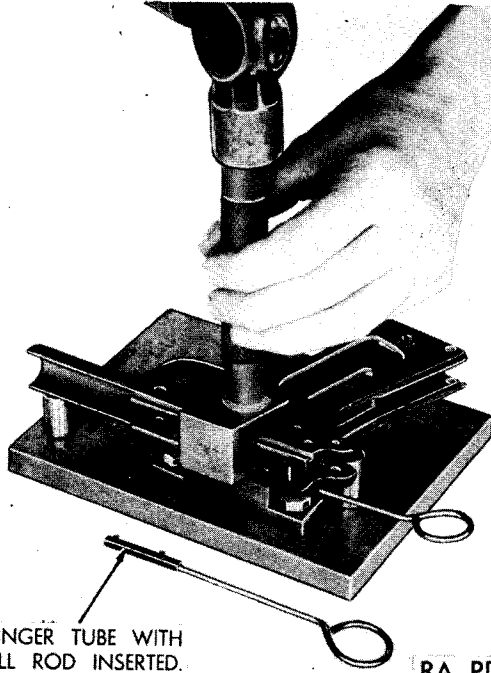


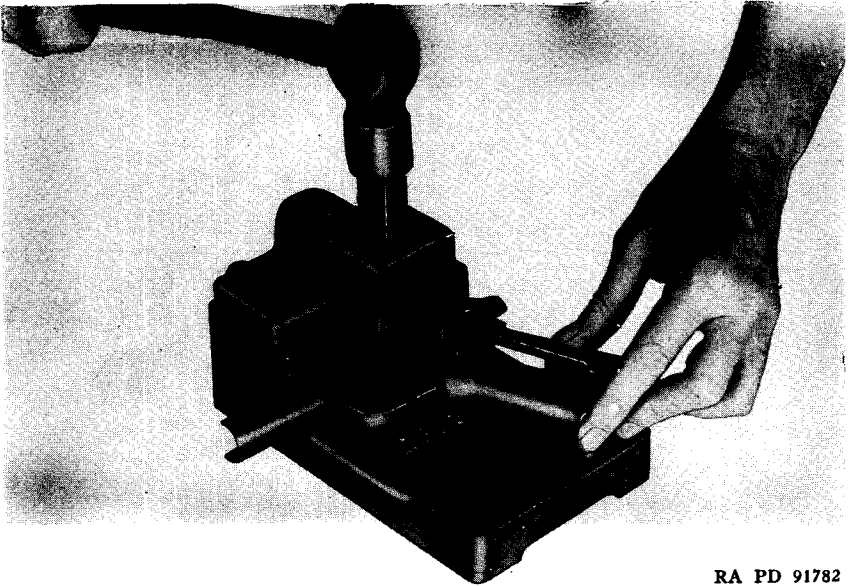
Figure 52. Staking stock screw bushings.

RA PD 91783



RA PD 91794

Figure 53. Staking slide stop plunger tube.



RA PD 91782

Figure 54. Swaging slide stop notch.

g. Slide the mainspring housing into the receiver and over the sear spring until it is within $\frac{1}{8}$ inch of being fully installed (fig. 57).

h. Be certain that the trigger is still in the fired position and that the strut will be positioned in the recess of the mainspring cap. Place the grip safety in position, then slide the mainspring housing up into the receiver, and install the mainspring housing pin (fig. 44). Cock the hammer, and holding the safety lock (thumb safety) midway between upper and lower positions, push into place.

i. Install the stocks and secure with stock screws.

28. Functional Check

a. Pull the hammer back to the half cock position to determine whether it will remain there when the trigger is pulled.

b. Pull the hammer to almost full cock position and let it slip. The hammer should not fall past the half cock position.

c. Cock the hammer to full cock position. Push the safety lock upward and squeeze the trigger several times. The hammer must not fall. Push the safety lock downward.

d. Without depressing the grip safety pull the trigger several times. The hammer must not fall.

e. Depress the grip safety and squeeze the trigger. The hammer should fall. The grip safety should move at least $\frac{1}{3}$ inch before the hammer is released.

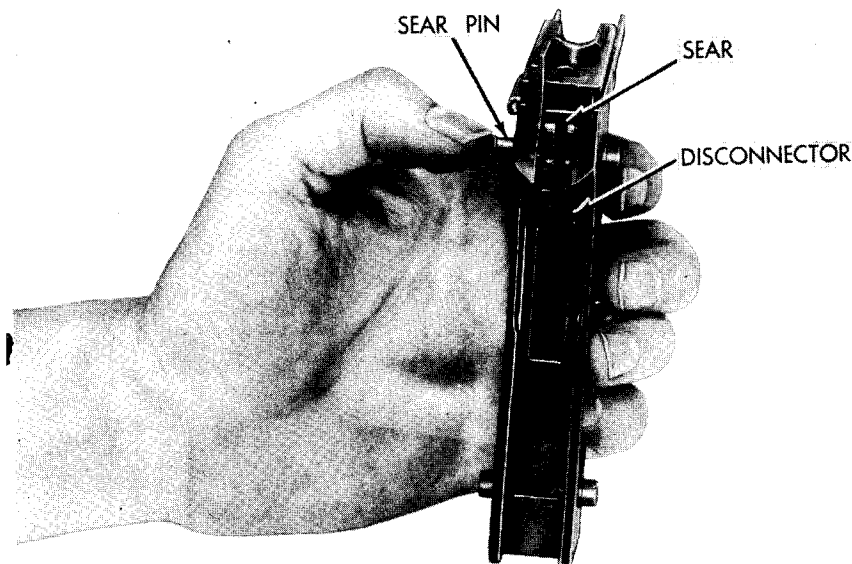


Figure 55. Installing sear and disconnecter.

RA PD 91786

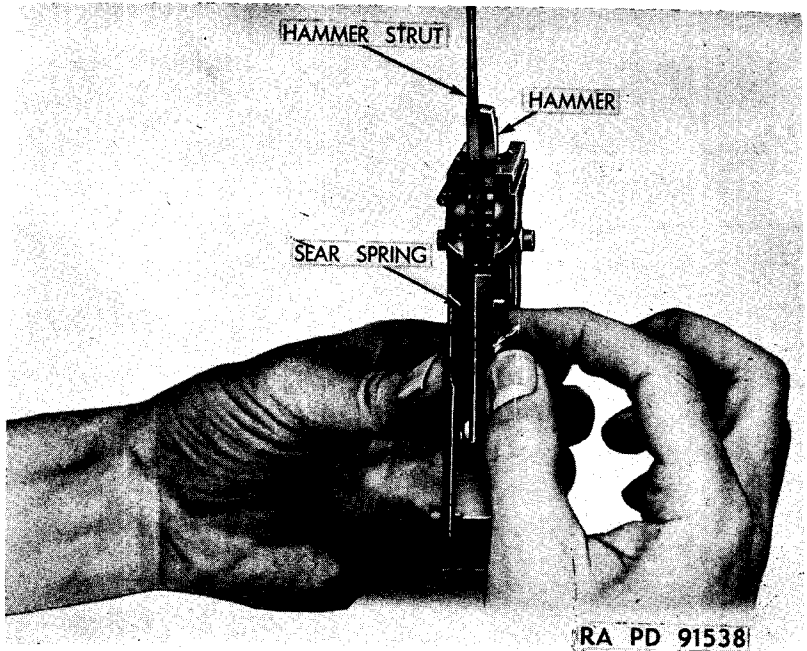


Figure 56. Installing sear spring.

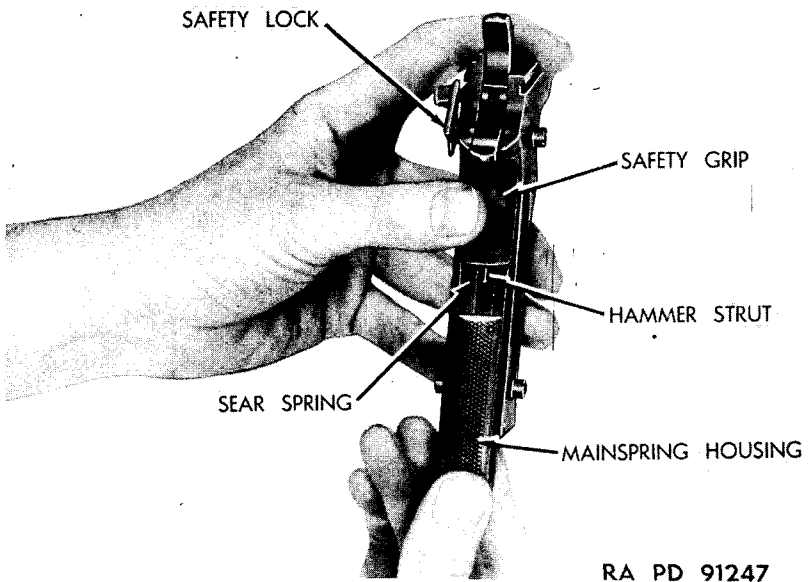


Figure 57. Installing mainspring housing.

SECTION VIII

MAGAZINE GROUP

29. Disassembly

a. Push the follower downward in the magazine to compress the spring at least one inch. Place a pin through one of the holes in the magazine to hold the spring compressed. Remove the follower. Pull the pin, holding the hand over the spring to prevent it from flying out and thus causing injury.

b. The lower magazine plate can be removed when necessary, by driving out two pins from the plate and magazine (fig. 6).

30. Inspection

a. Inspect the magazine tube for deformation or burs (fig. 61). Black finish must be on the complete housing. Reject housings with only lower half finished.

b. Inspect the spring for kinks and weakness (fig. 58).

c. Inspect the follower for burs (fig. 58).

31. Maintenance and Repair (Field and Base Maintenance)

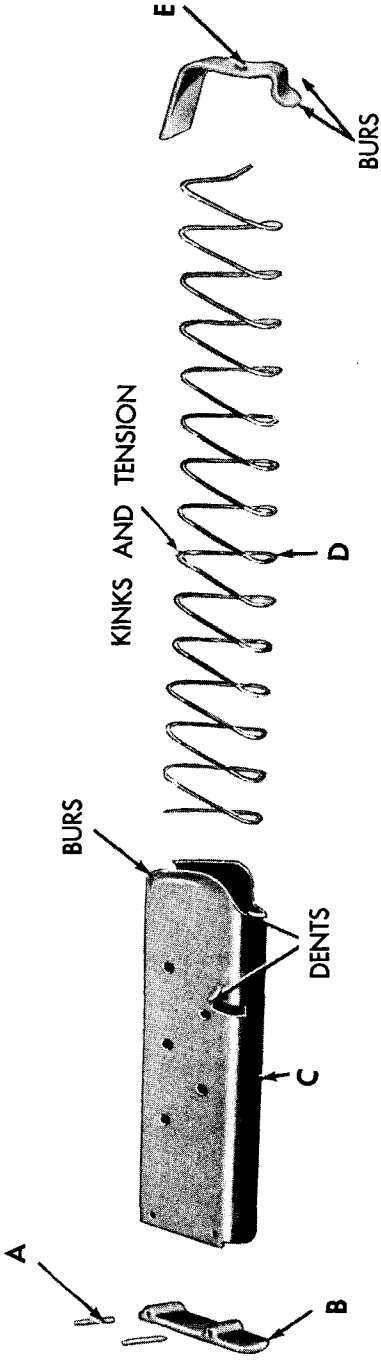
Maintenance and repair of the magazine assembly by the third and fourth echelon shops consist of removal of burs with a fine file or stone, and the replacement of worn or damaged parts.

32. Maintenance and Repair (Base Maintenance)

Maintenance and repair of the magazine assembly by fifth echelon shops consist of the operations described in paragraph 31, with the addition of refinishing the parts with first and second grade black phosphate finish. Refer to TM 9-1861 on operation and maintenance of black finishing equipment for ferrous metals.

33. Assembly

Install the spring into the magazine tube assembly and compress at least one inch. Hold the spring compressed, by placing a pin or punch through a hole in the housing. Slide the follower in position in the housing. Remove the punch carefully, allowing the follower to be pushed up against the lips of the housing.



A-PIN A13216
B-BASE B8606

C-TUBE C8695
D-SPRING B8607
E-FOLLOWER B8608

RA PD 91206

Figure 58. Magazine group—exploded view.

SECTION IX

ASSEMBLY OF PISTOL

34. Assembly

a. Hold the slide group upside down with the barrel outward, and push the barrel, recoil spring, and guide as far forward as possible. Turn the receiver group upside down and assemble it to the slide in that position (fig. 59). Be certain that the barrel link is tilted forward when assembling the receiver to the slide. Push the receiver forward as far as possible.

b. Turn the pistol right side up, and aline the hole in the barrel link with the hole in the receiver. Insert the pin end of the slide stop from the left side of the pistol. Move the slide forward until the middle notch is directly opposite the projection on the slide stop. Push the slide stop pin inward and upward into position (fig. 60). Move the slide to its foremost position.

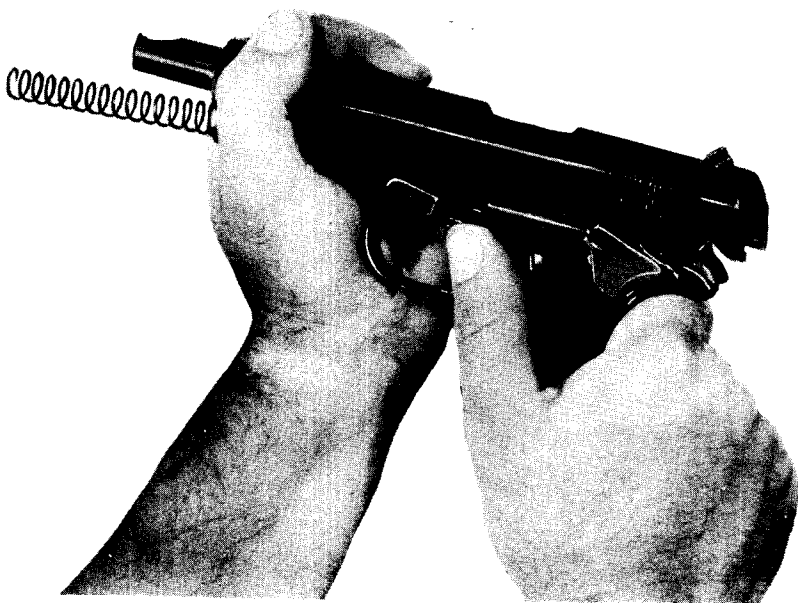
c. Cock the hammer and engage the safety lock. Place the recoil spring plug over the end of the recoil spring and push the plug and spring into position in the slide. Turn the barrel bushing counterclockwise until the lips hold the recoil spring and plug compressed in place (fig. 24).

d. Insert the magazine by pushing smoothly and firmly into position until it is engaged by the magazine catch.



RA PD 10481

Figure 59. Installing slide group on receiver group, barrel link tilted forward.



RA PD 10482

Figure 60. Placing slide stop pin in position.

SECTION X

FINAL INSPECTION AND FUNCTION FIRING

35. Final Inspection

- a.* Inspect the weapon for general appearance and finish.
- b.* Perform the trigger pull test as described in paragraph 9.
- c.* Perform the safety tests as described in paragraph 9.
- d.* Check to see that the empty magazine will drop out of the pistol when the magazine catch is depressed. The slide must operate smoothly when manually operated.

36. Function Firing

- a.* Function fire six rounds of standard caliber .45 ball ammunition.
- b.* Make repairs and adjustments as required during function firing, and refire to prove these adjustments when necessary.
- c.* Clean the barrel after firing in accordance with instructions in paragraph 14.
- d.* Record serial numbers.
- e.* Dip pistol and magazine in medium preservative lubricating oil and drain.
- f.* Wrap and pack in accordance with existing instructions.

APPENDIX

REFERENCES

1. Publications Indexes

Consult the following publications indexes frequently for latest changes or revisions of references given in this section, and for new publications relating to materiel covered in this manual.

Introduction	WD Cat. ORD 1
Ordnance supply catalog index	WD Cat. ORD 2
Ordnance major items and combinations, and pertinent publications	SB 9-1
List and index of War Department publications	FM 21-6
List of War Department films, film strips and recognition film slides	FM 21-7
Military training aids	FM 21-8

2. Standard Nomenclature Lists

CLEANING AND PRESERVING.

Items of cleaning, preserving and lubricating materials; recoil fluids, special oils, and miscellaneous related items	WD Cat. ORD 3 SNL K-1
Items of soldering, metallizing, brazing and welding materials; gases and related items.	WD Cat. ORD 3 SNL K-2

GUN MATERIEL.

Pistol, automatic, cal. .45, M1911 and M1911A1.....	SNL B-6
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REPAIR.

Tools, maintenance, for repair of small and hand arms, and pyrotechnic projectors.....	WD Cat. ORD 6 SNL B-20
Truck, 2½ ton, 6 x 6, small arms repair M7 and M7A1	SNL G-138

3. Supplemental Publications

CHEMICAL ATTACK AND DECONTAMINATION.

Defense against chemical attack	FM 21-40
Decontamination	TM 3-220
Maintenance and care of hand tools	TM 9-867

GUN MATERIEL.

Ammunition, general	TM 9-1900
Small arms ammunition	TM 9-1990
Qualifications in arms and ammunition training allowances	AR 775-10

Automatic pistol, caliber .45, M1911
and M1911A1FM 23-35

INSPECTION, MAINTENANCE, AND LUBRICATION.

Cleaning, preserving, sealing, and related materials
issued for ordnance matérielTM 9-850

Inspection of ordnance matérielTM 9-1100

Small Arms: General instructions for care,
preservation, and lubricationTB 9-2835-9

Black finishing equipment for ferrous metals.....TM 9-1861

STORAGE AND SHIPMENT.

Long-term storage of small arms matérielSB 9-65

Ordnance storage and shipment chart—group B— small
arms, hand arms, semi-automatic rifles, pyrotechnic
projectors, scabbards, and arm chests, arm lockers,
and arm racksSB 9-OSSC-B

Instruction Guide, Ordnance packaging and shipping
(Posts, camps, and stations)TM 9-2854

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