

SPRINGFIELD ARMORY

ORD

RESEARCH AND DEVELOPMENT

Ord Project:

TS2-2015

Report:

SA-NM11-2617

DA Project:

502-08-006

Date:

27 March 1958

Report Title: Notes on Development Type Material for Rifle, Caliber 7.62MM, T44E5 (M15)

Author: 1

Head, Rifle Sect

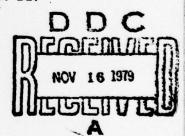
Weapons Dev Br

Approved:

H. F. HAWTHORNE

Chief, Res & Dev Div

These Notes have been prepared under the direction of the Office, Chief of Ordnance



U. S. ARMY INFANTRY HUMAN RESEARCH UNIT

> AUG 7 1961

Box 2086, Ft. Benning, Go.

DISTRIBUTION STATEMENT A

Approved for public releases Distribution Unlimited

SPRINGFIELD, MASSACHUSETTS

DC FILE COPY



DEPARTMENT OF THE ARMY

ARI FIELD UNIT, BENNING

U. S. ARMY RESEARCH INSTITUTE FOR THE BEHAVIORAL AND SOCIAL SCIENCES PO BOX 2086 FORT BENNING, GEORGIA 31905

PERI-IJ

8 August 1979

SUBJECT: Shipment of Documents

Defense Documentation Center Cameron Station Alexandria, VA 22314 ATTN: Selection & Cataloging

The Documents in these shipments are approved for public release. The distribution is unlimited.

FOR THE CHIEF:

ALEXANDER NICOLINI Major, Infantry

R&D Coordinator

DISCLAIMER NOTICE

THIS DOCUMENT IS BEST QUALITY PRACTICABLE. THE COPY FURNISHED TO DDC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

13 48

Report: | SA-NM11-2617

Date.

27 Mar 58

Report Title:

Notes on Development Type Materiel for Rifle, Caliber 7.62101, 144R5 (M15)

Approved:

H. F. HAWTHORNE Chief, Res & Dev Div

10) C. P. PACKARD

Weapons Dev Br

Project Title: Rifles, Shoulder-fired, Infantry Types (Lightweight

Development)

Ord Project:

TS2-2015

DA Project:

502-08-006

Preparing Agency: Springfield Armory, Springfield, Mass.

This report does not contain any copyright matter.

Initial distribution of this report has been made in accordance with the attached distribution list. Requests for additional copies will be made direct to the Commanding Officer, Diamond Ordnance Fuse Laboratories, Washington 25, D. C., ATTN: Technical Reference Section, ORDTL 06.33.

Prepared for Publication by: United Engineers, Inc.
Contract DA 19-059-ORD-2555

REPORT SA-IN-11-2617

CONTENTS

		Page
Section 1.	Introduction	4
II.	General Description	5
III.	General Data	7
IV.	Operation	8
	1. Application of Safety	8
	2. Loading of Rifle	8
	3. Semiautomatic Fire	8
	4. Full Automatic Fire	8
	5. Bolt Lock	9
	6. Unloading of Rifle	9
v.	Functioning	10
	1. Operational System	10
	2. Semiautomatic Fire	10
	a. Recoil Movement	10
	b. Counterrecoil Movement	10
	3. Full Automatic Fire	11
	a. Recoil Movement	11
apen ed (in	b. Counterrecoil Movement	11
VI.	Disassembly of Rifle	12
	1. General Disassembly (Field-stripping)	12
	2. Bolt Group	13
	3. Barrel and Receiver Group	13
	4. Trigger Group	14
	5. Stock Group	15
	6. Magazine Group	15
VII.	Assembly of Rifle	14

CONTENTS - Continued

		Page
Section VIII.	Accessories	18
	 Charger, Magazine, T16 Trigger, Winter, Auxiliary, T6 	18 18
IX.	Service and Maintenance	19
	1. Cleaning and Lubrication 2. Tools	19 19
x.	Distribution	20
APPENDIX A - 1	det of Parts	23
APPENDIX B - P	hotographe (8)	28
APPENDIX C - F	igures (5)	29

TIS	GRA&I		1
DC T.			1
	ounced		1
	ricati		
У			
istr	15014	-/	
	labild		ndes
., ., .	Avai		
ist.		clal	
131	- Spe	_	
14	12	3	
-		\mathbf{A}	

SECTION I. INTRODUCTION

This report is directed to personnel charged with the use, care, and maintenance of the Caliber 7.62mm T44E5 (M15) Rifle. The subject rifle is a heavy barrel version of the Caliber 7.62mm T44E4 (M14) Rifle, designed to permit sustained full automatic fire.

REPORT SA-MILL-2617

SECTION II. GENERAL DESCRIPTION

The caliber 7.62mm, T44E5 (M15) rifle is a heavy barreled, air-cooled, gas-operated, magazine-fed, shoulder weapon, designed for selective semiautomatic or full automatic fire. In principle of operation, it is similar to the M1 rifle. The T44E5 is chambered for the NATO caliber 7.62mm cartridge, and a 20-round box magazine has been added.

The operational mechanism of the T44E5 (NI5) is identical with that of the T44E4 (NI4) and is basically similar to that of the MI rifle. The receiver, bolt, and firing pin are shorter than those components of the MI. A roller was added to the bolt stud in order to reduce friction at the operating rod cam surface during locking and unlocking of the bolt. The trigger subassembly is basically the same as that of the MI, but the trigger housing floor plate was cut back to allow for insertion of the magazine. The magazine latch is located in a recess in the forward face of the trigger housing.

The bolt lock is mounted on the left side of the receiver.

The rear sight group, mounted on the receiver, is composed of M1 rifle parts.

The sear release, selector shaft, and connector assembly, mounted on the right side of the receiver and positioned by the selector lock, are inoperative during semiautomatic firing.

The operating rod is a welded assembly, composed of a handle and a capped short tube. This tube houses the operating rod spring and the operating rod spring guide. The rear end of the operating rod spring guide serves as a front latch for the box magazine and is attached to the receiver by the connector lock. The operating rod tube slides in the operating rod guide which is pinned to the barrel. The end of the operating rod tube abuts the gas piston when the operating rod is in its forward position.

SECTION II. GENERAL DESCRIPTION - Continued

The gas cylinder, unlike that of the Ml rifle, contains a hollow gas piston and is mounted on the barrel with the gas port located approximately eight inches from the muzzle. The gas cylinder positions the front band against a shoulder on the barrel and is locked in place by the looped gas cylinder lock and gas cylinder plug. The wooden hand guard is secured to the barrel by the front and rear bands.

The flash suppressor is held in place on the barrel by the flash suppressor nut which is locked by a socket setscrew. The flash suppressor is of the five-pronged type with a closed front end. The wide lower prong provides moderate compensation for muzzle climb.

The front sight is mounted on the flash suppressor.

The barrel and receiver group is bedded in a conventional drop stock. The butt plate assembly is similar to the B.A.R. butt plate design in providing a hinged shoulder rest. The butt swivel, attached to the stock, is an Ml rifle component. The bracket of the front swivel assembly is riveted to the forearm of the stock. The receiver well opening and the recoil abutments in the stock are reinforced by the stock liner which is attached to the stock by two stock liner screws. The stock is locked to the barrel and receiver group by the trigger group.

The bipod is attached to the flash suppressor by a sleeve type mount and spring loaded retainer latch to provide both positive retention and ready removal. The bipod legs are adjustable for height and may be folded rearward to rest against the underside of the stock.

SECTION III. GENERAL DATA

Weight of basic rifle (with empty magazine, less sling)	13.7	1b.
Weight of rifle, ready to fire (fully loaded with sling)	15.0	16.
Length of rifle (with hinged butt plate folded)	45.30	in.
Length of rifle (with hinged butt plate extended)	47.34	in.
Length of barrel	22.0	in.
Rifling, four grooves, right-hand twist	12.0	in.
Sight radius (at 100 yds.)	25.87	in.
Type of mechanism	rotating b	olt
Method of actuation	gas-opera	ted
Loading device	-round char	ger
Loading device 10- Cyclic rate	-round char 725 r.	
wetter was not fine were out of one there are all offer	725 r.	
Cyclic rate	725 r.; 7.5	p.m. air lb.
Cyclic rate Cooling Trigger pull, maximum	725 r.; 7.5	p.m. air lb. lb.
Cyclic rate Cooling Trigger pull, maximum minimum	725 r.; 7.5 5.5 2800 f.;	p.m. air lb. lb.
Cyclic rate Cooling Trigger pull, maximum minimum Muzzle velocity	725 r.; 7.5 5.5 2800 f.;	p.m. air lb. lb. p.s.
Cyclic rate Cooling Trigger pull, maximum minimum Muzzle velocity Magazine capacity Chamber pressure, maximum	725 r.; 7.5 5.5 2800 f.; 20	p.m. air lb. lb. rd.
Cyclic rate Cooling Trigger pull, maximum minimum Muzzle velocity Magazine capacity Chamber pressure, maximum Ammunition types Ball,	725 r.; 7.5 5.5 2800 f.; 20 50,000 p.;	p.m. air lb. lb. rd. rd.

SECTION IV. OPERATION

1. Application of Safety.

Place the safety in the SAFE position by cocking the hammer and snapping the safety rearward.

2. Loading of Rifle.

- a. Place the safety in the SAFE position.
- b. Insert a loaded magazine into the magazine well, front end leading, until the front catch snaps into engagement; then pull backward and upward until the magazine latch snaps into position.
- c. Pull the operating rod handle to its rearmost position and release; this allows the top round to rise and the bolt to move forward, thus stripping and chambering a round from the magazine.

3. Semiautomatic Fire.

- Press in and turn the selector until it snaps into position with its blank face to the rear and its projection downward. The connector assembly is inoperative in this position since the connector is held forward and out of engagement with the operating rod.
- b. Load the rifle and release the safety. The rifle will now fire one round upon each pull of the trigger.

4. Full Automatic Fire.

a. Press in and turn the selector until it snaps into position with the face marked "A" to the rear and the prejection upward. This rotation of the eccentric selector shaft moves the sear release to the rear into contact with the sear and moves the connector assembly rearward into contact with the operating rod.

SECTION IV. OPERATION - Continued

- b. Load the rifle and release the safety.
- matically as long as the trigger is squeezed and there is ammunition in the magazine. To cease firing, release the trigger.

5. Bolt Look.

When the last round of ammunition is fired, the magazine follower engages the bolt lock and raises it into the path of the retracted bolt; this holds the bolt in the OPEN position.

6. Unloading of Rifle.

- e. Place the safety in the SAFE position.
- b. Grasp the magazine, placing the thumb on the magazine latch, and squeeze the latch. Push the magazine forward and downward to disengage it from the front catch and remove the magazine from the magazine well.
- c. Pull the operating handle rearward to extract and eject a chambered round, and to inspect the chamber. The rifle is now clear.

SECTION V. FUNCTIONING

1. Operational System.

Operational power is derived from a gas cutoff and expansion system. In this system, gas is bled from the barrel through a port in its underside which registers with a port in the rear loop of the gas cylinder and a port in the wall of the hollow gas piston, Propellant gases, released by firing, enter these ports and are trapped in the hollow chambers in the gas piston and gas cylinder. The piston, in contact with the operating rod, is driven rearward a complete stroke (one and one-half inches). The resultant force is of sufficient magnitude to drive the operating rod and the bolt to their rearmost positions, and to compress the operating rod spring. The exhaust port in the bottom of the gas cylinder is uncovered as the gas piston nears the end of its stroke; this allows the expanded gases to escape.

The reaction of the operating rod spring now returns the bolt and operating rod to their original positions.

The gas system functions in the same manner for all firing cycles.

2. Semiautomatic Fire.

a. Recoil Movement.

During its rearward travel, the operating rod unlocks and carries the bolt assembly rearward; this action extracts and ejects the fired cartridge case, and cocks the hammer. Ammunition is lifted into the path of the retracted bolt by action of the magazine spring and follower.

b. Counterrecoil Movement.

The operating rod moves forward under spring pressure; this carries the bolt assembly forward, stripping the top round from the magazine, chambering the round, and locking the bolt in battery position.

SECTION V. FUNCTIONING - Continued

3. Full Automatic Fire.

a. Recoil Movement.

- (1) After approximately one-eighth inch of rearward travel, the operating rod disengages from the hook on the connector assembly. This allows the spring-loaded connector assembly to move rearward and to rotate the sear release out of engagement with the sear.
- (2) With the trigger held back, the sear engages the hammer.

b. Counterrecoil Movement.

- (1) As the operating rod moves forward, the hammer remains in the cooked position until the shoulder on the operating rod engages the hook on the connector assembly. Further travel of the operating rod moves the connector assembly forward, rotates the sear release against the sear, and disengages it from the hammer. This disengagement allows the hammer to fall and to fire the chambered cartridge.
- (2) Because the firing pin is prevented from moving forward prematurely by the bridge in the receiver, the weapon cannot be fired until the bolt is locked (or driven into the locked position by action of the nose of the hammer against the cam on the rear end of the bolt).
- (3) If the trigger is released at any time prior to the firing of the last round, the hammer will be held in the cocked position by the trigger lugs (secondary sear) and automatic actuation of the sear release by the connector assembly will not release the hammer to fire the chambered cartridge.

SECTION VI. DISASSEMBLY OF RIFLE

1. General Disassembly (Field-stripping).

- a. Unload the rifle, remove the magazine, and place the safety in the SAFE position. Remove the bipod by pressing the latch on the underside of the bipod head toward the left and slide the bipod assembly forward off of the flash suppressor.
- b. Turn the rifle upside down with the muzzle pointing to the left.
- c. Insert the nose of a cartridge into the hole in the trigger guard and pry upward to unlatch the trigger guard.
- d. Swing the trigger guard upward and lift the trigger group from the stock.
- Separate the stock from the rifle by cradling the receiver firmly in one hand and by striking upward sharply on the stock butt with the palm of the other hand.
- f. Turn the barrel and receiver group on its side with the connector assembly upward. (Press in and turn the selector until the face marked "A" is toward the rear sight knob and the projection forward.) Press forward on the connector with the right thumb until the forward end can be lifted off the connector look. Rotate the connector, clockwise, until the slot at the rear end is aligned with the elongated stud on the sear release. Lower slightly the front end of the connector and lift it from the sear release.

NOTE: The connector assembly is a semipermanent assembly and it should not be disassembled.

g. With the barrel and receiver group upside down, pull forward on the operating rod spring, relieving pressure on the connector look. Pull the look outward, disconnect the operating rod spring guide, and remove the spring guide and spring. Turn the barrel and receiver group right side up.

SECTION VI. DISASSEMBLY OF RIFLE - Continued

- h. Betract the operating rod until the key on its lower surface coincides with the dismount notch in the receiver. Lift the operating rod free and pull to the rear, disengaging it from the operating rod guide.
- i. Grasp the bolt group by the roller and, while sliding it forward, lift it upward and outward to the right front with a slight rotating motion. The rifle is now field-stripped, and basic assemblies such as the bolt and the trigger groups may be disassembled, if required.

2. Bolt Group.

With the bolt in the left hand and the thumb over the ejector, insert the blade of a screw driver between the extractor and the lower cartridge seat flange. Pry the extractor upward to unseat it. The ejector will snap out against the thumb. Lift out the ejector assembly, and the extractor plunger and spring. Remove the firing pin from the rear of the bolt.

NOTE: No attempt should be made to disassemble the roller from the bolt stud.

3. Barrel and Receiver Group.

- a. Disassemble the rear sight as follows: Run the aperture all the way down and record the reading for use in reassembling the sight. Hold the elevating knob and unscrew the nut in the center of the windage knob. Withdraw the elevating knob. Unscrew and remove the windage knob. Pull the aperture up about one-half inch. Place the thumb under the aperture and push upward and forward to remove the aperture, cover and base. Separate the rear sight cover from the rear sight base.
- b. Loosen the setscrew in the lower left side of the flash suppressor. Unscrew the flash suppressor nut and slide the flash suppressor forward off the barrel.

SECTION VI. DISASSEMBLY OF RIFLE - Continued

- c. Loosen and remove the gas plug, using the gas cylinder plug wrench. Tilt the muzzle down and remove the gas piston from the gas cylinder. Unscrew the gas cylinder lock and slide the lock and the gas cylinder off the barrel.
- d. Slip the front band off the barrel. Push the hand guard forward and lift it from the barrel.

NOTE: The bolt lock, charger guide, operating rod guide, and sear release with selector are semipermanent assemblies held together by spring pins. These pins must be driven out with appropriate drift punches to disassemble these parts.

4. Trigger Group.

- a. To disassemble the trigger group, close and latch the trigger guard. Squeeze the trigger, allowing the hammer to go forward. Hold the trigger housing group with the first finger of the right hand on the trigger and the thumb against the sear. Place the front of the trigger housing against a firm surface. Squeeze the trigger with the finger and push forward on the sear with the thumb. At the same time, using the tip of a cartridge, push out the trigger pin from left to right. Slowly release the pressure with the finger and thumb; this allows the hammer spring to expand.
- b. Lift out the trigger assembly. Remove and separate the hammer spring plunger, hammer spring, and the hammer spring housing.
- c. Push out the hammer pin from left to right, using the tip of a cartridge. Move the hammer slightly to the rear and lift out.

SECTION VI. DISASSEMBLY OF RIFLE - Continued

- d. Unlatch the trigger guard. Push out the stud of the safety from its hole. Remove the safety and safety spring. Slide the trigger guard to the rear until the wings of the trigger guard are aligned with the safety stud hole. Rotate the trigger guard to the right and upward until the hammer stop clears the base of the housing. Remove the trigger guard.
- e. Drive out the magazine latch spring pin with a suitable drift to remove the semipermanently assembled magazine latch and spring.

5. Stock Group.

- a. Disassemble the butt plate assembly and butt swivel from the stock by removing the butt plate screws.
- b. Remove the stock liner by unscrewing the stock liner screws, using a suitable spanner wrench. Press the heavy vertical bars at the rear of the liner together and push the liner out of the bottom of the stock rear end first.

NOTE: The front swivel bracket is permanently riveted to the forearm.

The stock ferrule on the front of the forearm is a semipermanent assembly and should not be disassembled.

6. Magazine Group.

e. Hold the magazine upside down and lift the skirted end of the magazine base to disengage the detent. Slide the base off the magazine tube.

CAUTION: Exercise care when removing the base because the magazine spring is under pressure.

b. Remove the magazine spring and magazine follower, and then separate them.

SECTION VII. ASSEMBLY OF RIFLE

To assemble the rifle, reverse the disassembly procedure. However, the following instructions are provided to facilitate and to insure satisfactory assembly:

Hand Guard:

To assemble the hand guard, when the gas cylinder and related components are in place, position the front end of the guard in the front band and snap the rear band of the hand guard assembly into the barrel grooves.

NOTE: The hand guard need not be reassembled prior to assembly of the gas cylinder and related domponents.

Trigger Group.

To assemble the trigger group to the stock and receiver, cock the hammer and swing the trigger guard to the open position. Insert the assembly into the receiver, and close the trigger guard.

Gas System.

To assemble the gas system, replace front band, gas cylinder, and gas cylinder lock. Tighten the lock by hand to its full assembled position and then back off until the loop is aligned with the gas cylinder. Assemble the piston and the gas cylinder plug.

SECTION VII. ASSEMBLY OF RIFLE - Continued

To prevent loosening under the vibration of firing, tighten securely each of the following components:

Nut, Flash Suppressor
Setscrew, Socket, Full Dog Point (to lock the flash
suppressor nut)
Plug, Gas Cylinder (tighten with a torque of approximately 15 ft-lb.)
Screw, Front Sight

NOTE: The reassembled rifle should be hand-operated without ammunition to check for correct assembly and for freedom of action of such components as the safety, trigger, hammer, operating rod, bolt, piston, selector, connector, bolt catch, and magazine follower. The magazine should also latch and unlatch properly.

SECTION VIII. ACCESSORIES

1. Charger, Magazine, T16. (Fig. 1)

To load the rifle, retract the bolt, place safety in SAFE position, insert the magazine charger (holding ten rounds of ammunition) into the guide located in the top of the receiver, and press down on the column of cartridges to strip the rounds from the charger into the magazine.

2. Trigger, Winter, Auxiliary, T6. (Fig. 2)

- a. To assemble the winter trigger to the trigger and trigger guard, open the trigger guard and insert the end of the trigger guard between the actuator assembly and the lever, and then between the coiled spring and the support. (The lever inclines to the rear and away from the rifle.) Swing the cylindrical section of the actuator up over the front of the trigger and close the trigger guard.
- b. To disassemble the winter trigger, reverse the foregoing procedure.

NOTE: The winter trigger is designed to provide a means of firing this rifle when arotic mittens are worn.

SECTION IX. SERVICE AND MAINTENANCE

1. Cleaning and Lubrication.

- a. Before the rifle is fired, it should be disassembled and cleaned thoroughly; a light coat of oil should be applied to all metal parts except the bore, chamber, and other parts which come in contact with the ammunition. Particular care should be exercised to lubricate locking lugs of bolt, bolt roller, bolt guides, cooking cam on bolt, operating rod guide groove, camming surfaces of operating rod, and operating rod spring.
- b. Promptly after the rifle is fired, it should be cleaned and lubricated. The bore should be swabbed with a flannel cleaning patch saturated with either bore cleaner or hot water and soap solution; it should then be brushed and dried with patches, and protective oil applied. The chamber should be cleaned with a chamber cleaning brush, wiped clean with a cloth, and ciled lightly. The piston, gas cylinder, and gas cylinder plug should be disassembled, and excess carbon deposits removed by careful scraping and cleaning with rifle bore cleaner. When all carbon has been removed, the components should be wiped dry and ciled lightly. Other metal parts should be cleaned with a dry cloth to remove dampness, dirt, and perspiration, and then ciled lightly.

2. Tools.

- a. Wrench, gas cylinder plug (Fig. 3)
- b. Allen wrench (for use with No. 6 sorew)
- e. Brush, chamber cleaning
- d. Brush, cleaning, caliber .30
- e. Rod, cleaning, jointed, caliber .30, M10
- f. Screw driver
- g. Drift Punches

REPORT SA-MILL-2617

SECTION X. DISTRIBUTION

	Copie
Chief of Ordnance	9
Department of the Army	ed amount to
Washington 25, D.C.	
ATTN: ORDTS (2)	
ORDIR (3)	
ORDPD (2)	
ORDFS (2)	
white hor and beside at the man and religion her	
The President, Board No. 3	Paramental Author
United States Continental Army Command	
Fort Benning, Georgia	
Commanding General	en alle en unitage
United States Continental Army Command	
Fort Monroe, Virginia	
of Viloup attended to the state of the state	
Commanding Officer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Diamond Ordnance Fuse Laboratories	
Washington 25, D.C.	
ATTN: Technical Reference Section	
ORDTL 06.33	
CALL STAND THEORY - CENTRAL DEFINE THE ALL	
Commanding Officer	数 工工工作 经特别债权工品
Springfield Armory	itto mela bas jaoti
Springfield, Massachusetts	
ATTN: ORDBD-TX	
Commanding General	B ADSUGIA OF
Aberdeen Proving Ground, Maryland	8
ATTN: Development and Proof Services (3)	
The Ordnance Training Command (2)	
The Ordnance Board (1)	
United States Army Ordnance Explosive Disposal	Office (2)
Commandant	
The Ordnance School	de la frage /5
Aberdeen Proving Ground, Maryland	
12072118 GLOUIN, FIRTYLAND	
Commanding Officer	and the same of th
Raritan Arsenal	2 miles 1922
Metuchen, New Jersey	
ATTN: National Maintenance Publications Conten	

SECTION X. DISTRIBUTION - Continued

	Copies
Commanding Officer	1
Rossford Ordnance Depot	
Toledo, Ohio	
ATTN: ORDDW-TEM	
Commandant	2
United States Military Academy	
West Point, New York	
ATTN: Department of Ordnance and Gunnery	
Commandant	1
United States Marine Corps	
Washington 25, D.C.	
ATTN: Division of Plans and Policies	
Commanding General	6
Ordnance Weapons Command	
Rock Island, Illinois	
ATTN: ORDOW-TX (3)	
National Development (1)	
Industrial Engineering (1)	
National Maintenance (1)	
Commanding Officer	1
United States Army Ordnance Test Activity	
Yuma Test Station	
Yuma, Arizona	
Commanding Officer	1
Arctic Test Branch	
Fort Creeley Alacka	

APPENDICES

Wash Point, New York

APPENDIX A - List of Parts, T44E5 Rifle

APPENDIX B - Photographs (8)

APPENDIX C - Figures (5)

APPENDIX A

List of parts, T44E5 (M15) Rifle*

^{*}Figures 4 and 5

LIST OF PARTS, T44E5 (M15) RIFLE

(See Fig. 4 and 5, App. C)

Ordnance Dwg. No.	Components	fumber, Spare Parts for Maintenance of 100 Weapons
D6008868	Aperture, Rear Sight	4
SA-C-24043	Band, Front	5
	Barrel and Receiver, Assembly	
	(composed of)	
SA-F-34831	1 - Barrel	6
C7267028	1 - Guide, Packet Charger	2
B7267035	1 - Look, Connector	10
B7267042	1 - Pin, Connector Lock	10
BFXS2.1	1 - Pin, Spring	2
(586064)		
F7267056	1 - Receiver	
D5546001	Base, Rear Sight	2
D7267005	Bolt, Assembly (composed of)	6
D7267004	1 - Bolt and Roller, Assembly	
77067000	(composed of)	
F7267003	1 - Body, Bolt	10
B7267059	1 - Retainer, Bolt Roller	10
B7267065	1 - Roller, Bolt	
B7267015	1 - Ejector, Cartridge with Spri Assembly (composed of)	ng, ie
C7267014	1 - Ejector, Cartridge	
B7267077	1 - Spring, Cartridge Ejecto	r
F5546003	1 - Extractor	8
C7267043	1 - Pin, Firing	20
B6008618	1 - Plunger, Extractor Spring,	15
20000020	Assembly (composed of)	
B5013671	1 - Plunger. Extractor Sprin	g.
B6008886	1 - Plunger, Extractor Sprin 1 - Spring, Extractor	
D7267012	Connector, Assembly (composed of)	8
D7267011	1 - Bar, Connector	
D7267024	1 - Guide, Connector Spring	
B7267050	1 - Plate, Connector	
B7267076	1 - Spring, Connector	
C6008872	Cover, Rear Sight	2
3A-C-24048	Cylinder, Gas	4

LIST OF PARTS, T44E5 (M15) RIFLE - Continued

Ordnance Dwg. No.	Components	Number, Spare Parts for Maintenance of 100 Weapons
	Guard, Hand and Band, Assembly	10
	(composed of)	
B6008870	1 - Band, Rear Hand Guard	
SA-C-24050	1 - Guard, Hand	
D7267023	Guard, Trigger and Stop, Assembly (composed of)	4
D7267022	1 - Guard, Trigger	
B7312633	1 - Stop, Hammer	
SA-B-34122	Guide, Operating Rod	4
C7267027	Guide, Operating Rod Spring	10
D5546008	Hammer	4.
C6008883	Housing, Hammer Spring	.v 2
D7267031	Housing, Trigger and Latch, Assembl (composed of)	y 4
F7267030	1 - Housing, Trigger	
C7267032	1 - Latch, Magazine	5
BFSX2.1	1 - Pin, Spring	5
(586081)		4679764
B7267041	1 - Spring, Magazine Latch	. 1
D7312737	Knob, Windage, Rear Sight, Assembly	4
	(composed of)	
D7312735	1 - Knob, Windage, Rear Sight	
C7312731	1 - Look, Rear Sight Nut	
C7312726	1 - Nut, Rear Sight	
B7312728	1 - Retainer, Rear Sight Nut	
C7267034	Lock, Bolt	4
SA-B-24054	Look, Gas Cylinder	4
C7267172	Lock, Selector Shaft	5
D7267038	Magazine, Assembly (composed of)	1000
C7267019	1 - Follower, Magazine and Stop, Assembly (composed of)	
D7267018	1 - Follower, Magazine	
B7267085	1 - Stop, Follower	
C7267051	1 - Plate, Magazine Floor	
C7267078	1 - Spring, Magazine	
D7267091	1 - Tube, Magazine	
SA-B-31699	Nut, Stabilizer	5

LIST OF PARTS, T44E5 (M15) RIFLE - Continued

	ваниеновае	10 H 14 H
Ordnance Dwg. No.	Components	Number, Spare Parts for Maintenance of 100 Weapons
Dr012660	brand book mask , hast -	
B5013668	Pin, Hammer	4
BFSX2.1 (586072)	Pin, Spring	10
BFSX2.1	Pin, Spring	2
(586045)	rin, opring	
BFSX2.1	Pin, Spring	20
(586070)		#20V0S10
B5013669	Pin, Trigger	4 08 10
D7312738	Pinion, Elevating, Rear Sight,	AWAH 4 SECTION
	Assembly (composed of)	D7267031 E0D
C7312733	1 - Dog, Indexing, Assembly (composed of)	
C7312725	1 - Dog, Indexing	
B7312729	1 - Retainer, Rear Sight So	rew
C7312730	1 - Screw, Rear Sight	2 0000
BEAX1	1 - Washer, Look Tooth Type	
(138534)	to be because A control of the Contr	
D7312734	1 - Knob, Elevating, Rear Sight	
D7312736	1 - Pinion, Elevating, Rear Sign	nt certain
B7312727	1 - Retainer, Dog	
D7312732	1 - Spring, Rear Sight	
D7267047	Piston	49791576
C7267053	Plug, Gas Cylinder	placi 469 Yes Yo
B6008880	Plunger, Hammer Spring	2
D7267058	Release, Sear	of) 5
D7267064	Rod, Operating, Assembly (composed	of) 8
F7267029	1 - Handle, Operating Rod	
B7267092	1 - Tube, Operating Rod	* ***********************************
D7267066	Safety	2
D7267067	Sorew, Front Sight	2
SA-B-31946	Screw, Stabilizer Nut, Look	10
C7267071	Selector Short Selector	2
C7267072 D7267073	Shaft, Selector Sight, Front	5 5 2
B7267074	Spring, Bolt Look	2
B6008887	Spring, Hammer	5
B7267079	Spring, Operating Rod	5
21201017	phr 01 oborgoning mon	

LIST OF PARTS, T44E5 (M15) RIFLE - Continued

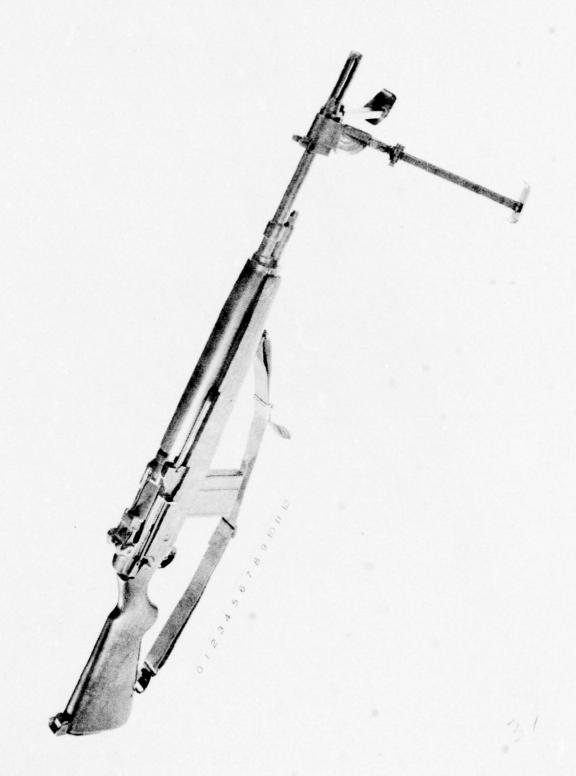
Ordnance Dwg. No.	Components	Number, Spare Parts for Maintenance of 100 Weapons
B7267080	Spring, Safety	5 5 10
B7267081	Spring, Selector	5
SA-F-33598	Stook Assembly, Heavy Barrel (composed of)	10
SA-A-24049	1 - Ferrule, Stock	
SA-C-34120	1 - Liner, Stock	
SA-D-32057	1 - Plate, Butt Hinge Assembly	
	(composed of)	
D6147465	1 - Cap, Butt Plate	
A5152865	1 - Pin, Butt Plate Cap	
SA-C-32056	1 - Plate, Butt, Assembly	
B5152864	1 - Plunger, Butt Plate	
B5152863	1 - Spring, Butt Plate Plun	ger
SA-C-32055	1 - Plate, Shoulder Rest	
SA-A-33364	1 - Pin, Hinge, Shoulder Re	st
CCAX1	1 - Ball	
(104918)		
SA-A-33974	1 - Setecrew	
A5013747	1 - Spring, Shoulder Rest	
C6008881	1 - Sorew, Butt Plate, Long.	2 2
B6146873	1 - Sorew, Butt Plate, Small	2
C6008889	1 - Swivel, Butt	2
BMCX1.3	2 - Rivet, Truss Head	10
(106886)		
SA-B-38554	1 - Screw, Stock, Left Side	4
SA-B-38555	1 - Screw, Stock, Right Side	4
SA-F-34119	1 - Stock	
C7267089	<pre>1 - Swivel, Front, Assembly (composed of)_</pre>	2
B7267007	1 - Bracket, Front Swivel	
B7267037	1 - Loop, Front Swivel	
SA-D-31921	Suppressor, Flash	5
C7267090	Trigger and Sear, Assembly	5
	(composed of)	
A5013673	1 - Pin, Sear	
D7267070	1 - Sear	
D5546020	1 - Trigger	

APPENDIX B

PHOTOGRAPHS (8)

View		
1	19-058-621/ORD-58	Left-side View
2	19-058-620/ORD-58	Right-side View
3	19-058-622/ORD-58	Field-stripped
4	19-058-630/ORD-58	Magazine Disassembled
5	10913-SA	Disassembled Bolt Group
6	10914-SA	Disassembled Trigger Group
7	10915-SA	Disassembled Connector Assembly, Connector Lock, Selector and Bolt Lock
8	19-058-623/ORD-58	Gas System

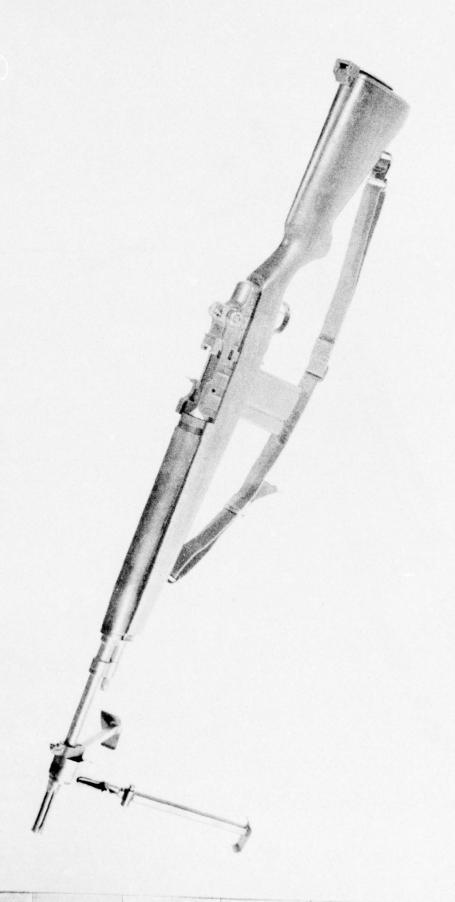
1 - Norwey Stock, Left Side



18 June 1958

19-058-620/ORD-58

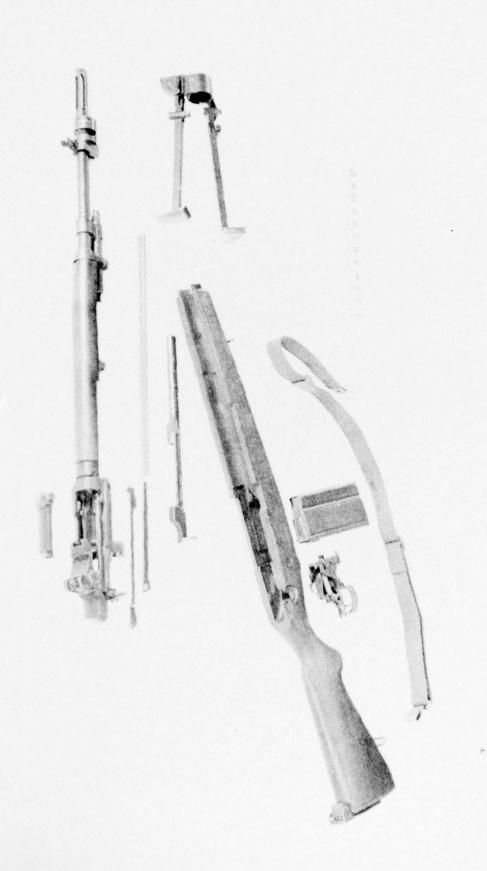
SPRINGFIELD ARMORY RIFLE, CALIBER 30, T44E5 Right Side View



19-058-621/ORD-58

SPRINGFIELD ARMORY RIFLE, CALIBER. 30, T44E5
Left Side View

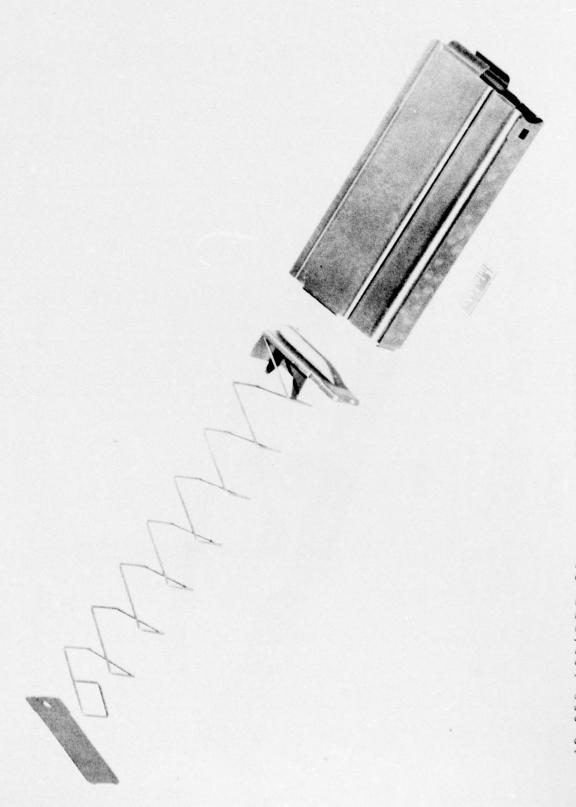
17 June 1958



18 June 1958

19-058-622/ORD-58

SPRINGFIELD ARMORY SPRINGFIELD RIFLE, M15 Field-stripped



19 JUNE 58

19-058-630/ORD-58

SPRINGFIELD ARMORY

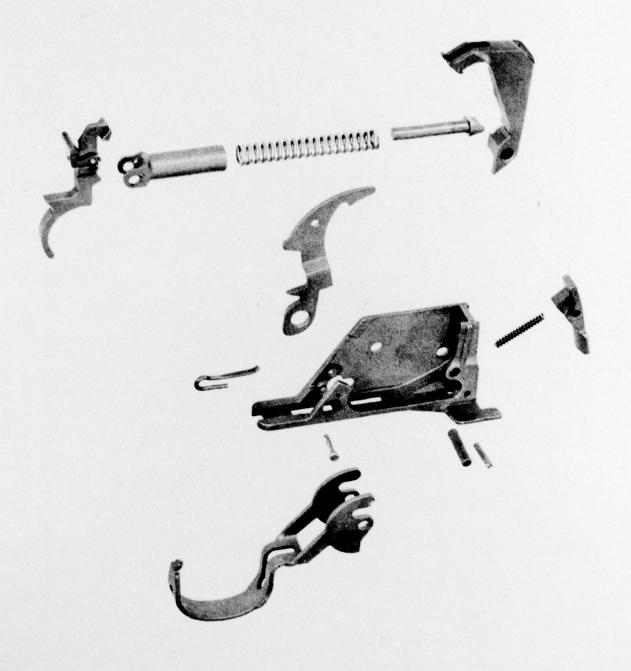
RIFLE CALIBER .30, T44E4 and T44E5 MAGAZINE DISASSEMBLED



•

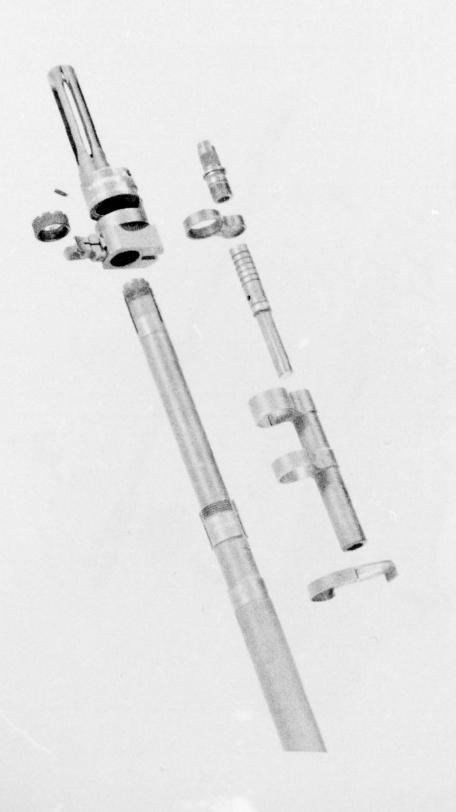
SPRINGFIELD ARMORY - ORDNANCE CORPS 13 June 1955 RIFLE, CALIBER. 30, T44E4 Disassembled Bolt Group.

10913-SA





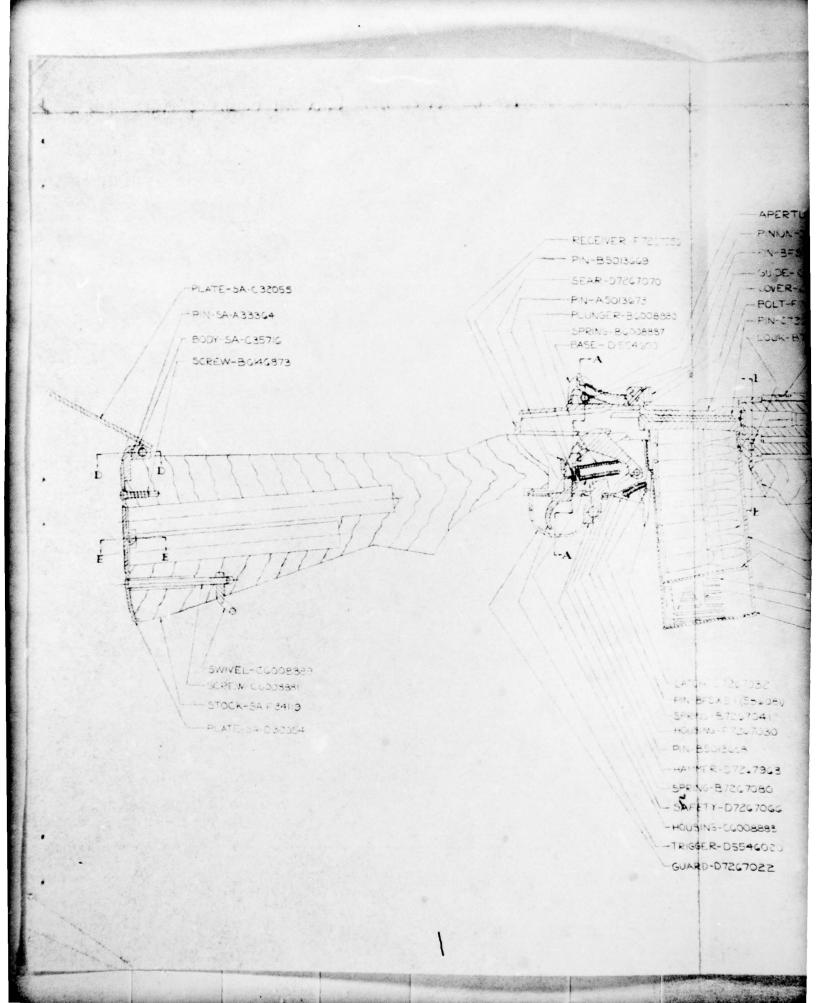
13 June 1955 Disassembled Connector Assembly, Connector Lock, Selector and Bolt Lock SPRINGFIELD ARMORY - ORDNANCE CORPS RIFLE, CALIBER. 30, T44E4 10915-8A

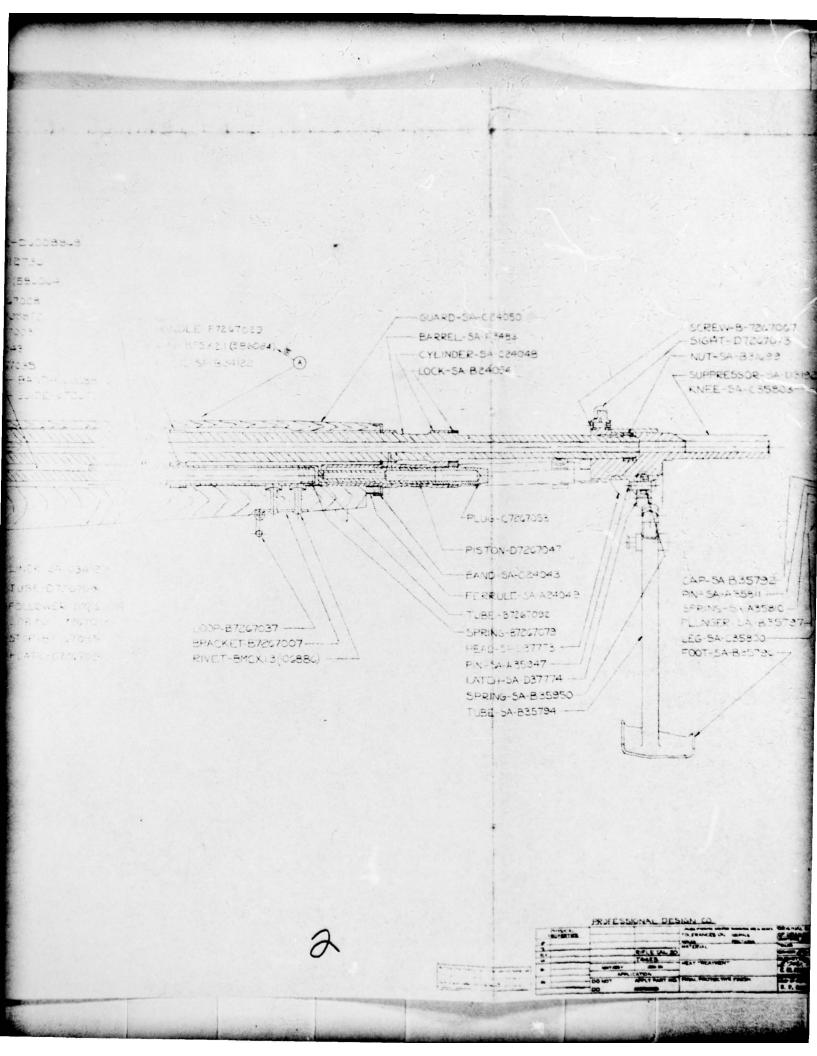


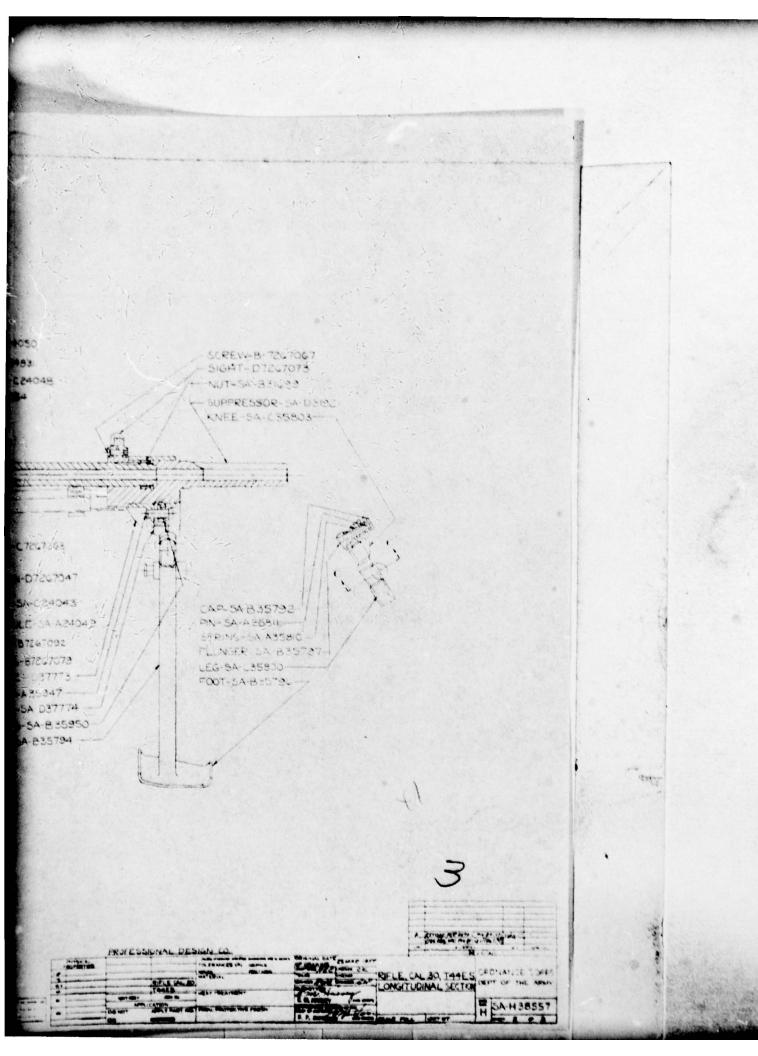
19-058-623/ORD-58

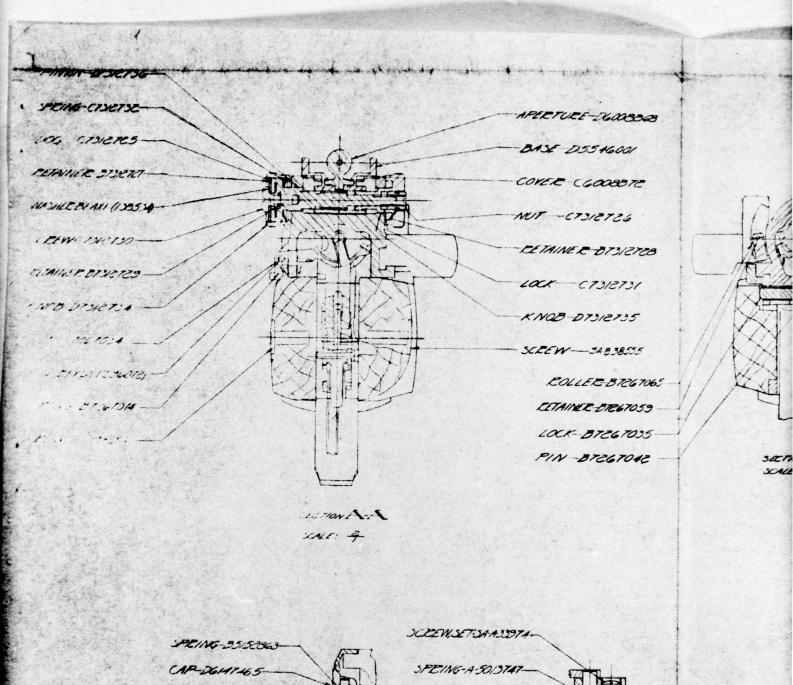
SPRINGFIELD ARMORY RIFLE, CALIBER 30, T44E5 Gas System

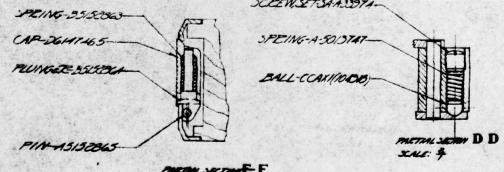
18 June 1958



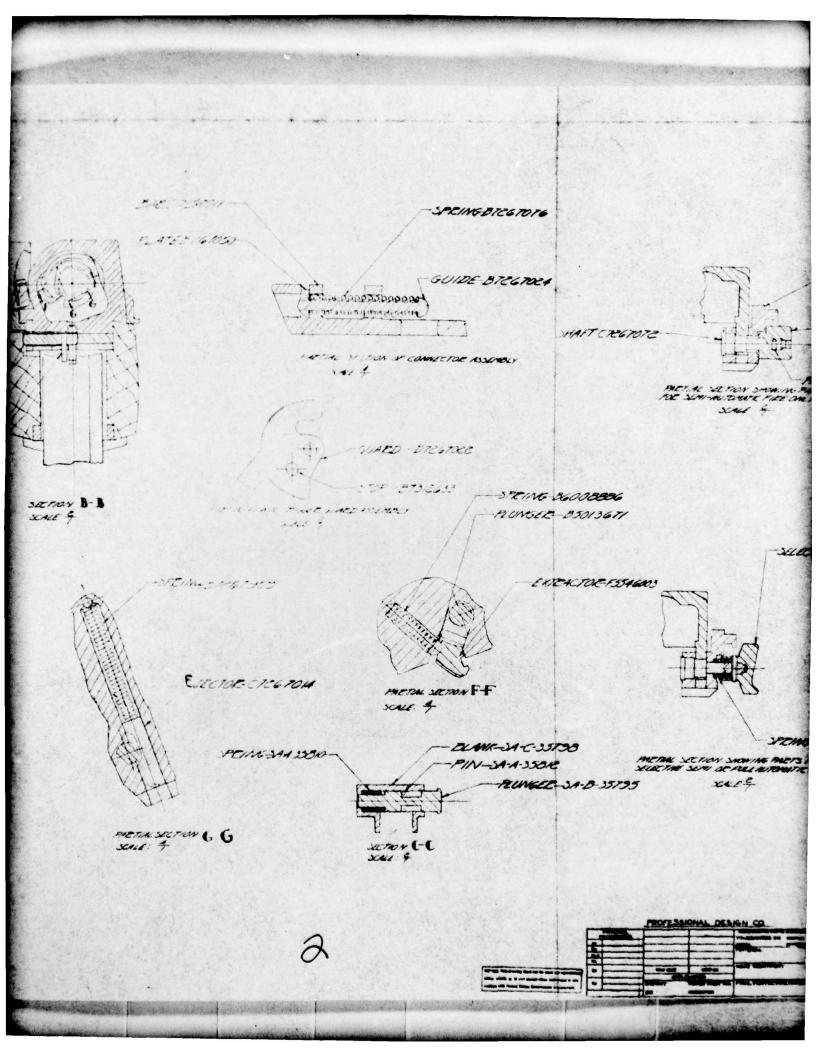


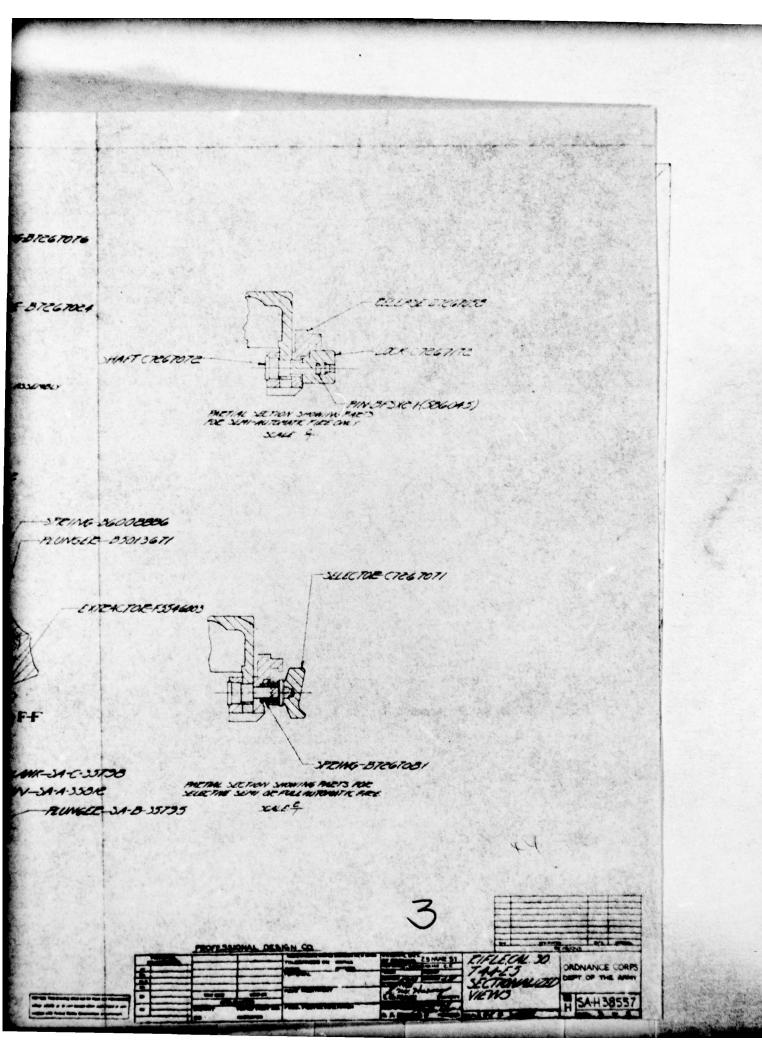






MEDIE SETTINE E.



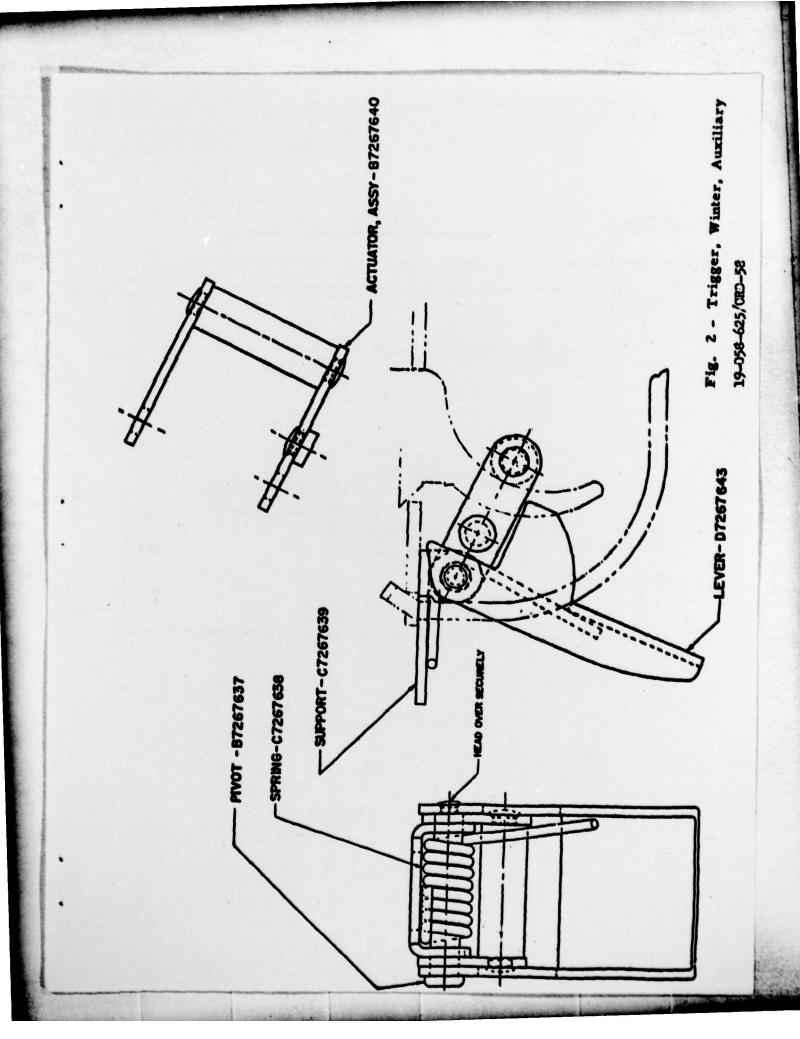


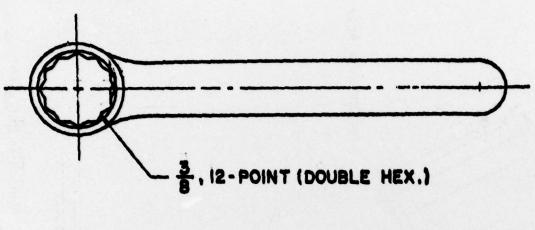
REPORT SA-NM11-2617

APPENDIX C

FIGURES (5)

Figur	<u>e</u>	
1	19-058-624/ORD-58	Charger, Magazine
2	19-058-625/ORD-58	Trigger, Winter Auxiliary
3	19-058-626/ORD-58	Wrench, Gas Cylinder, Plug
4)	SA-H38557, Sheet 2	Sectional Views of Rifle, Caliber . 30, T44E5 (M15)
5)	SA-H38557, Sheet 3	





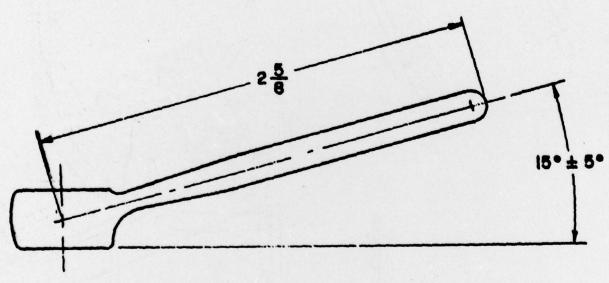


Fig. 3 - Wrench, Gas Cylinder, Plug 19-058-626/ORD-58