TM 9-1005-249-14
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CHANGE
No. 3

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., *1 September 1967*

Operation, Maintenance, Repair, and Replacement Parts

RIFLE, 5.56-MM, M16; RIFLE, 5.56-MM, M16A1; BIPOD ASSEMBLY, M3; AND LAUNCHER, GRENADE, 40-MM, XM148

TM 9-1005-249-14, 1 August 1966, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. Added or revised illustrations are indicated by a vertical bar adjacent to the identification number.

Old pages	*New pages*
Title (reverse blank)	Title (reverse blank).
i through vi	i through vi.
1-1 through 1-6	1-1 through 1-6.
2-1/2-2	2-1/2-2.
3-3 and 3-4	3-3 and 3-4.
3-13 and 3-14	3-13 and 3-14.
4-1/4-2	4-1/4-2.
6-1 and 6-2	6-1 and 6-2.
7-1 and 7-2	7-1 and 7-2.
8-7 and 8-8	8-7 and 8-8.
None	8-8A (reverse blank).
8-19 and 8-20	8-19 and 8-20.
9-1 through 9-12	9-1 through 9-12.
9-15 and 9-16	9-15 and 9-16.
9-19 through 9-24	9-19 through 9-24.
10-1 and 10-2	10-1 and 10-2.

2. This transmittal sheet should be filed in the front of the publication for reference purposes.

By Order of the Secretary of the Army:

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General, United States Army,
Chief of Staff.

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Major General, United States Army,
The Adjutant General.

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To be distributed in accordance with DA Form 12-40 requirements for Operator, 5.56-MM Rifles, M16 and M16A1.

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NAVWEP O.P. 3333
MC I.D. 05538A

TECHNICAL MANUAL

OPERATION, MAINTENANCE, REPAIR AND REPLACEMENT PARTS

RIFLE, 5.56-MM, M16; RIFLE, 5.56-MM, M16A1; BIPOD ASSEMBLY, M3; AND LAUNCHER, GRENADE, 40-MM, XM148

CHANGE NOTICE

LATEST CHANGE PAGES SUPERSEDED THE SAME PAGES OF PREVIOUS DATE

Insert changed pages into basic publication. Destroy superseded pages.

*This manual supersedes TM 9-1005-249-14, T.O. 11W3-5-5-1, NAVWEP O.P. 3333, 15 June 1964, including changes of 15 Nov 1964, 1 March 1965, 1 May 1965, 6 Sept 1965 and 14 Jan 1966.

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1 AUGUST 1966
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Precautions

RIFLES, M16, M16A1, AND BIPOD ASSEMBLY, M3

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

2. Wash hands thoroughly with soap and water after using cleaning agents. A lanolin base cream may be used after washing.

3. Only the cleaning agents in this manual and a vapor degreaser are authorized for cleaning. Before using a vapor degreaser, the following parts or components shall be removed:

STOCK ASSY, MOLDED: W/swivel	(27, Fig. 9-2)
GRIP, PISTOL:	(21, Fig. 9-2)
GUARD, HAND, GUN: R-H, and L-H.	(1 & 2, Fig. 9-3)
SWIVEL, FRONT:	(10, Fig. 9-3)

When removing stock assembly and pistol grip care should be taken to prevent loss of detents and springs. (22, 23, 33 and 36, Fig. 9-3)

LAUNCHER, GRENADE, XM148

1. Launcher should not be cocked, prior to loading.

2. Make certain trigger is extended, before cocking the launcher.

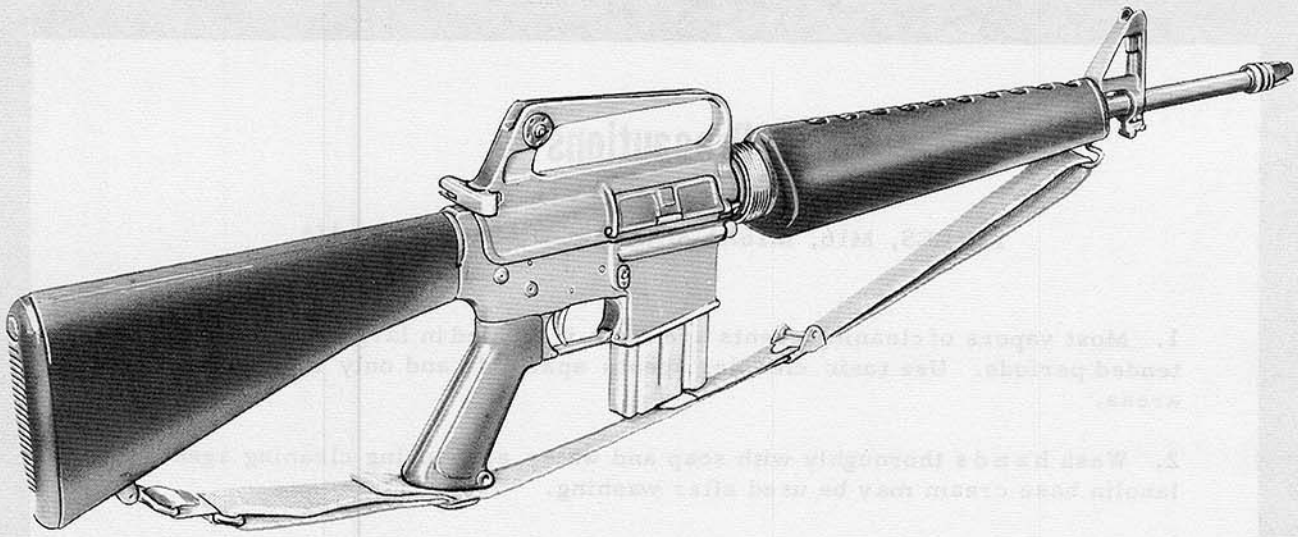
3. Do not fire launcher with front sling swivel or bayonet on the rifle.

4. When the grenade launcher safety lever is in the fire position, avoid striking or bumping the rifle or launcher.

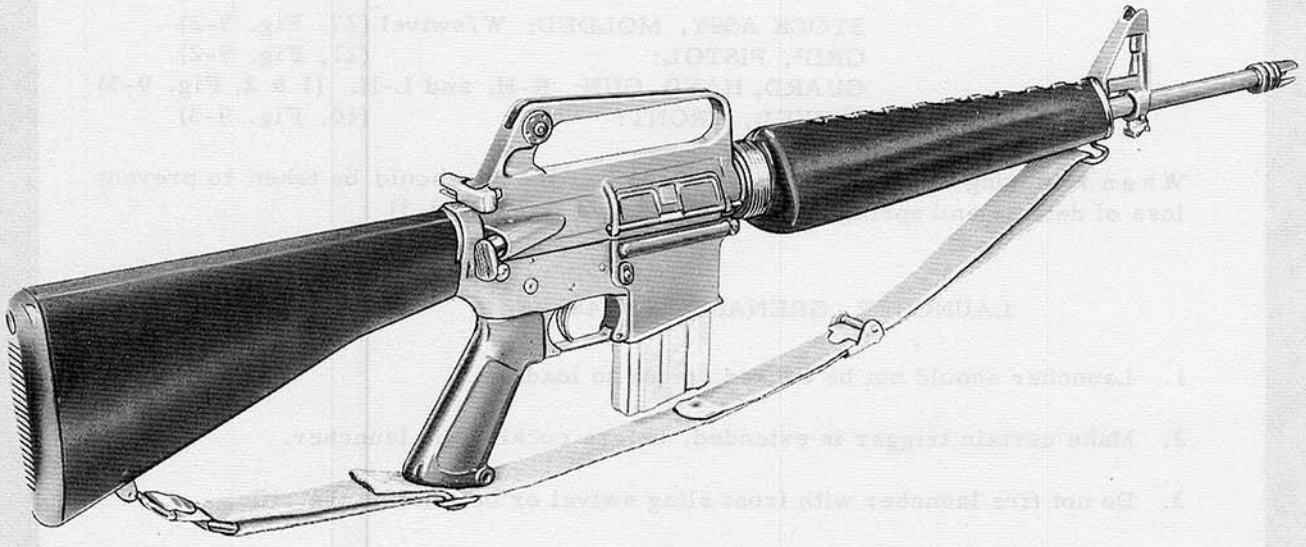
5. Make certain launcher and rifle are unloaded and safe prior to cleaning and lubrication and disassembly.

6. For range firing or training purposes, the rifle will not be loaded. In tactical situations when the rifle is loaded, the rifle selector lever will be in the "SAFE" position to prevent inadvertent fire during grenade launching. Rifle bullets could detonate grenade projectiles in flight with resultant hazard to firer or other personnel.

7. Use extreme care when removing and installing spring or roll pins to prevent enlarging holes.



RIFLE, 5.56 MM - M16



RIFLE, 5.56 MM - M16A1

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Figure 1-1. Rifle, 5.56-MM, M16 and M16A1.

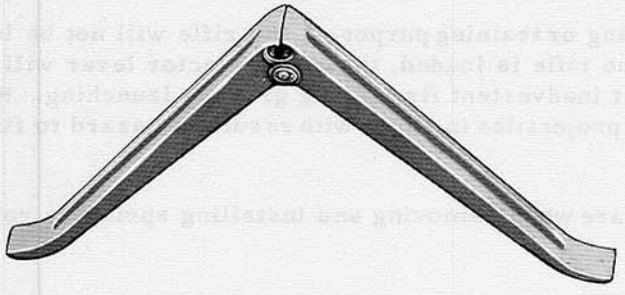

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Figure 1-1A. Bipod Assembly, M3.

CHAPTER I
INTRODUCTION

SECTION 1
PURPOSE AND SCOPE

1-1. GENERAL.

1-2. This manual is published for the information and guidance of personnel responsible for Operation, Organizational, and Direct and General Support Maintenance of 5.56-mm rifles M16, M16A1, bipod assembly, M3, and 40-mm grenade launcher, XM148. Pertinent information includes tabulated data, accessories and special tools, preparation for use, storage and shipment, operating instructions, preventive maintenance and lubrication procedures, ammunition, instructions on demolition, inspections, procedures on disassembly, cleaning, repair and assembly. Also included are basic items, tools and replacement parts.

Note

THE OPERATOR (USER) AND ORGANIZATIONAL MAINTENANCE PORTION OF THIS MANUAL FOR THE RIFLES AND BIPOD ASSEMBLY IS LISTED IN CHAPTERS I THROUGH VI AND FOR THE GRENADE LAUNCHER IN CHAPTER XII.

1-3. SUGGESTIONS AND RECOMMENDATIONS.

1-4. U.S. ARMY. Use DA Form 2028 for reporting of errors, omissions and recommendations for improvement and forward direct to:

Commanding General
Headquarters
U.S. Army Weapons Command
ATTN: AMSWE-SMM-P
Rock Island Arsenal
Rock Island, Illinois 61201

1-5. U.S. AIR FORCE. Publication deficiencies will be reported on AFTO Form 22 and processed in accordance with T.O. 00-5-1.

1-6. U.S. NAVY. Publication deficiencies will be reported on Publication Change Guide Form PRNC-NWP-5602-5 (Rev. 4-60).

SECTION 2
DESCRIPTION

1-7. DESCRIPTION.

1-8. Only M16A1 Rifle has a forward assist assembly with associated parts. Otherwise the M16 has the same components and parts.

Note

The instructions in this manual when different for each model will be noted accordingly.

1-9. The rifles (figure 1-1) are light-weight, air-cooled, gas-operated, magazine-fed, shoulder or hip guns and are designed for either full automatic or semiautomatic fire. The rifles accommodate a 20-round magazine.

1-9A. The bipod assembly, M3 (figure 1-1A) is a light weight non-adjusting mount which clamps on the barrel of the rifle.

Note

FOR DESCRIPTION OF GRENADE LAUNCHER, XM148 REFER TO CHAPTER XII.

1-10. Barrel is air-cooled and is provided with a flash suppressor, and may serve as a grenade launcher and a front support for the bayonet. The barrel is surrounded by a heat resisting fibre glass material, which serves as a hand guard and forearm. The hand guard has a heat resisting inner shield. The front and rear sights are adjustable.

1-11. Butt stock is made of a durable synthetic material of high impact strength.

1-12. Rifles are easily opened by pressing the take down pin exposing the working parts, making it convenient for cleaning and inspection.

1-13. The forward assist assembly, when actuated, forces the bolt forward to the locked position (M16A1).

1-14. Bolt locking action is one of the features of the rifles. The bolt contains locking lugs. Lugs on the barrel extension engage the bolt lugs and lock the bolt firmly in the barrel extension

with or without cartridge in chamber. Thus the full force of the explosion of the cartridge is absorbed by the barrel extension and bolt. Receiver is made of light-weight aluminum alloys. The safety, durability and function of the rifles is in no way reduced and the portability and logistical values greatly increased, particularly when air transport is used.

SECTION 3
TABULATED DATA
RIFLES, M16, M16A1 AND BIPOD ASSEMBLY, M3

1-15. TABULATED DATA.

Note

Tabulated data for the grenade launcher is listed in chapter XII.

1-16. Tabulated data pertaining to the general characteristics and performances are listed as follows:

Weight

M16 Rifle without magazine and sling	6.3 lb
M16A1 Rifle without magazine and sling	6.5 lb
M16A1 Rifle with grenade launcher	10.4 lb
Sling M1	.4 lb
Empty aluminum magazine (20-round)	.2 lb
Loaded aluminum magazine (20-round)	.7 lb
M16 Rifle with sling and loaded magazine (20-round)	7.4 lb
M16A1 Rifle with sling and loaded magazine (20-round)	7.6 lb
Telescope	.9 lb
Bipod Assembly M3	.6 lb
Bipod case	.2 lb
Bayonet-Knife M7	.6 lb
Scabbard M8A1	.3 lb

Length

Rifle with flash suppressor	39 in.

Length (Continued)	
Rifle with bayonet-knife	44.25 in.
Barrel	20 in.
Barrel with flash suppressor	21 in.
Mechanical Features	
Rifling, R.H. 6 grooves - 1 turn in 12"	
Bore maximum	.220 in.
Groove maximum	.2245 in.
Sight radius	19.75 in.
Trigger pull	
Maximum	8.5 lbs.
Minimum	5.0 lbs.
Method of operation	Gas
Type of mechanism	Rotating bolt
Method of feeding - magazine	20 rds
Cooling	Air
Ammunition	
Caliber	5.56-mm
Type	Ball and tracer
Firing Characteristics	
Muzzle velocity (approximate)	3250 fps
Muzzle energy	1300 ft - lb
Chamber-pressure	52,000 psi
Cyclic rate of fire	700/800 rds. per min.
Maximum rate of fire	
Semiautomatic	45/65 rds. per min
Automatic	150/200 rds. per min
Sustained rate of fire	12/15 rds. per min
Maximum range	2653 meters
Maximum effective range	460 meters

SECTION 4
ACCESSORIES, SPECIAL TOOLS, AND EQUIPMENT

1-17. ACCESSORIES.

1-18. Accessories are listed in Table 1-1.

1-19. SPECIAL TOOLS AND EQUIPMENT.

1-20. Special tools and equipment for the rifles are tabulated in table 1-2 and for the grenade launcher, in table 12-1 and are listed in Chapter IX of this manual. These tabulations contain only the tools utilized in performing the operations described in this manual.

TABLE 1-1. ACCESSORIES

Item	Identifying Number	Figure Number
BAYONET-KNIFE: M7	11010077	1-2
CASE, CARRYING:	2-2-246	1-4
CASE, LUBRICANT:	7790995	1-5
SCABBARD, BAYONET-KNIFE: M8A1	7268112	1-2

TABLE 1-2. SPECIAL TOOLS AND EQUIPMENT

Item	Identifying Number	References Fig.	Use
CASE, CARRYING, GAGE, BARREL:	7799809	-NI	For storing barrel erosion gage.
BRUSH, CLEANING, SMALL ARMS: bore	11686340	1-7	To clean barrel bore.
BRUSH, CLEANING, SMALL ARMS: chamber	8432358	1-12	To clean the chamber.
FIXTURE, BARREL REMOVER: vise jaws	11010032	1-9 8-4	Used with adapter to remove/install barrel nut and slip ring.
GAGE, BARREL EROSION:	7799792	1-13 8-5	To check remaining barrel life by checking barrel erosion.
GAGE, FIRING PIN PROTRUSION:	7799735	1-10 8-6	To check firing pin protrusion.
GAGE, HEADSPACE:	7799734	1-11 8-7	To gage headspace.
ROD, CLEANING, SMALL ARMS: M11E3	8436777	1-6 3-6A	Used with cleaning brush 11686340 to clean barrel bore and with cleaning brush 8432358 to clean chamber.
SLING, SMALL ARMS: M1	6544058	1-3	To carry rifles.
WRENCH, COMBINATION: barrel nut and flash suppressor	11010033	1-8 8-4	To remove and install barrel nut, slip ring and flash suppressor.

-NI NOT ILLUSTRATED

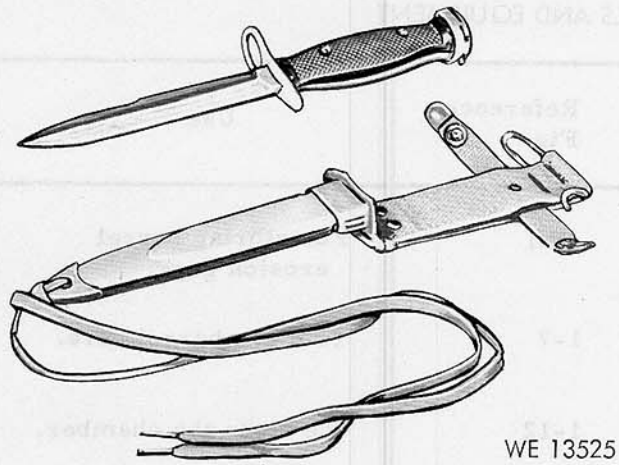

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Figure 1-2. Bayonet Knife M7 and Bayonet - Knife Scabbard M8A1 (Fig. 3-3)

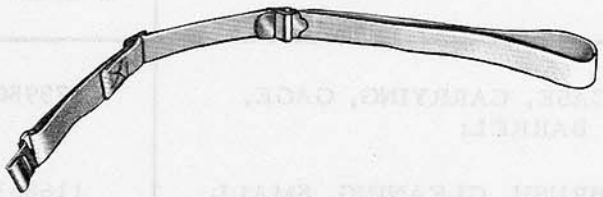

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Figure 1-3. Small Arms Sling, M1 (Fig. 3-5)

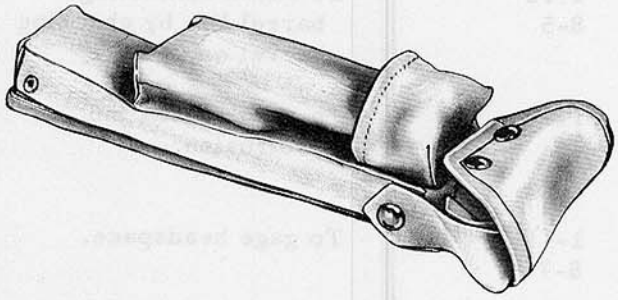

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Figure 1-4. Carrying Case - 2-?-246

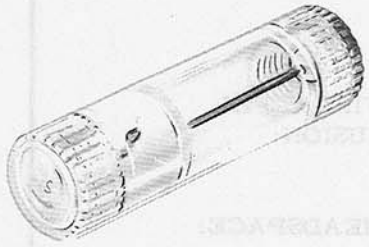

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Figure 1-5. Lubricant Case - 7790995

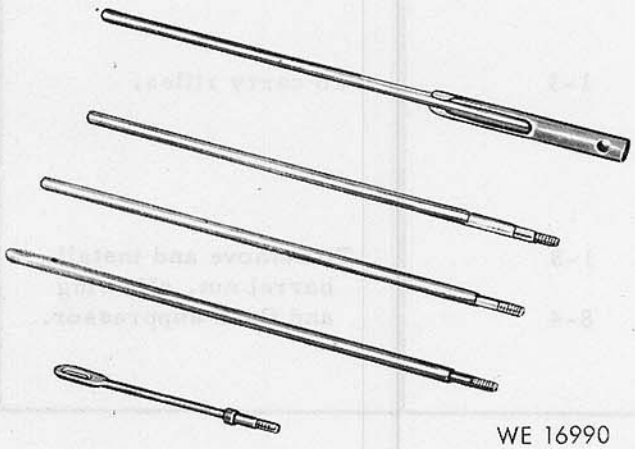

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Figure 1-6. Small Arms Cleaning Rod M11E3 - 8436777 (Fig. 3-6)

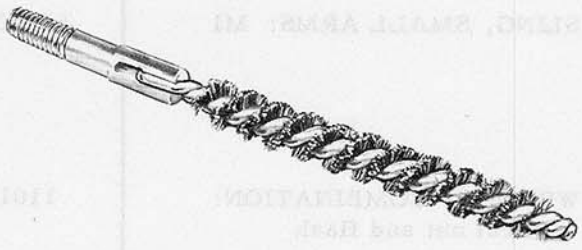

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Figure 1-7. Small Arms Cleaning Brush - 11686340 (Fig. 3-6)

CHAPTER II
PREPARATION FOR USE, STORAGE, AND SHIPMENT

SECTION 1
PREPARATION FOR USE

2-1. GENERAL.

2-2. When a new or reconditioned rifle, bipod assembly, or grenade launcher is received it is the responsibility of the officer in charge to determine whether the materiel has been properly prepared for service and to be sure it is in condition to perform its function.

2-3. All basic issue items, replacement parts, tools, and equipment will be checked with listing in Chapter IX.

2-4. A record will be made of all missing parts, tools, and equipment and of any malfunctions. Corrective action will be initiated as quickly as possible.

SECTION 2
PREPARATION FOR STORAGE AND SHIPMENT

2-5. STORAGE.

2-6. Rifles, bipod assemblies, or grenade launchers to be stored are to be cleaned, dried, preserved, packaged and marked as indicated in paragraphs 2-7 through 2-13, below.

CAUTION

Refer to precautions on page V, when cleaning.

2-7. CLEANING. Remove dust, dirt, grit or other foreign matter from surfaces of the weapon, making certain all components are clean.

2-8. DRYING. Component parts must be thoroughly dried before preserving and packing.

2-9. PRESERVATION AND PACKAGING. Rifles and bipod assemblies must be preserved with lubricating oil, (Section 3, Chapter VIII), and grenade launcher as indicated in paragraph 12-32, Chapter XII, and will be packaged in suitable containers or boxes.

2-10. MARKING. Marking instructions will be in accordance with applicable marking data.

2-11. SHIPMENT.

2-12. RESPONSIBILITY. When shipping the rifle, bipod assembly, or grenade launcher, the officer-in-charge of preparing the shipment will be responsible for furnishing the materiel properly processed for shipment.

2-13. PREPARATION FOR SHIPMENT. Rifles, bipod assemblies, or grenade launchers removed from storage for shipment need not be reprocessed unless inspection reveals them to be inadequately preserved.

REVERSE SIDE INTENTIONALLY LEFT BLANK

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3-5. CLEANING AND LUBRICATION BEFORE FIRING.

3-6. MATERIALS. The necessary cleaning materials consist of a cleaning rod, swabs, oil, solvent cleaning compound and brushes. Do not use cleaning agents other than those authorized in this manual.

CAUTION

When inserting rod into bore, hold at joints to prevent flexing or damage to rod.

3-7. CLEANING THE BARREL. Visually inspect the bore and chamber for condition and obstructions. Clean by pushing swabs through the bore (from the chamber to muzzle) until swabs protrude through flash suppressor.

3-8. CLEANING AND LUBRICATING THE BOLT CARRIER GROUP. The bolt carrier group may be removed, as shown in figure 3-5, for lubricating. Remove any accumulation of dirt or oil from firing pin, the external and internal surfaces of the bolt and bolt carrier with clean dry swabs or a rag. Also clean firing pin hole of bolt, using a pipe cleaner. Apply a coating of semi-fluid, lubricating oil (LSA) to the bolt and bolt (piston) rings, making certain the rings are well lubricated. A coating of semi-fluid, lubricating oil (LSA) will also be applied to the slides of the bolt carrier and the bolt cam pin area of the carrier.

3-9. LOADING.

Note

Reverse operation in figure 3-1.

3-10. LOADING THE MAGAZINE. The magazine has a capacity of twenty-rounds and may be loaded with any amount up to that capacity. The magazine follower has a raised portion generally resembling the outline of a cartridge. Cartridges are loaded into the magazine so that the tips of the bullets point in the same direction as the raised portion of the follower.

WARNING

Prior to loading make certain selector lever is in "SAFE" position.

3-11. LOADING THE RIFLE. The magazine may be inserted with the bolt and bolt carrier opened or closed. Hold the stock of the rifle under the right arm with the right hand. Grasp the pistol grip, and point the muzzle in a safe direction. With the left hand, insert a loaded magazine into the magazine housing. Push upwards until the magazine catch engages and holds the magazine. If the action is open, depress the upper portion of the bolt catch (figure 3-2) with the thumb of the left hand, allowing the action to close, chambering a round. If the action is closed when the magazine is inserted, pull the charging handle fully to the rear with the right hand and release it.

Note

Do not "ride" the charging handle forward with the right hand. If the charging handle is eased forward from the open position, the bolt may fail to lock. If bolt fails to go fully forward, use the bolt closure forward assist assembly (figure 3-2, XM16E1 only). For M16, recharge.

The rifle is now loaded, ready to fire.

WARNING

Make sure the selector lever is in the "safe" position, if not ready to fire.

3-12. FIRING.

3-13. SELECTOR LEVER. The rifle may be fired semi-automatically or fully automatically by moving the selector lever to the desired position described in 3-14 and 3-15.

3-14. SEMI POSITION. With the selector lever in this position, the rifle will fire one round each time the trigger is pulled.

3-15. AUTO POSITION. With the selector lever in this position, the rifle will continue to fire until the magazine is empty or the trigger is released. When the rifle is fired on either SEMI or AUTO, the bolt will lock in open position when the last round from a magazine has been fired.

3-16. STOPPAGE AND IMMEDIATE ACTION.

3-17. A stoppage is an interruption in the cycle of operation. When a stoppage occurs immediate action shall be taken to clear it.

3-18. To apply immediate action follow the sequence below:

a. Wait 10 seconds, then pull charging handle fully to the rear; observe for ejection of cartridge or cartridge case.

1. If a cartridge is ejected, release charging handle to feed a new round. Rap bolt closing forward assist assembly to assure bolt closure (M16A1). Attempt to fire the rifle.

2. If a cartridge or case is not ejected, a failure to extract or feed has occurred. Check for round in chamber. If chamber is empty, change magazine, reload and attempt to fire the rifle.

b. If a.1. above occurs, it may indicate a defective round, a broken firing pin, hammer spring or a bolt closure failure. (Refer to table 8-1.)

3-18A. OPERATION AFTER FORDING.

WARNING

Do NOT attempt to FIRE weapon if water is present in barrel. Fording, heavy rain, or fog can cause water to be present in the barrel.

Observe the following procedures to empty water from the barrel:

1. Point the muzzle down.

2. Pull charging handle slightly rearward, to allow water to drain from muzzle.

3. Press forward assist to make sure the round is seated in the chamber and the bolt is locked. The weapon can now be fired.

Note

Clean and lubricate, in accordance with par. 3-26 as soon as possible, after any moisture enters barrel.

3-19. UNLOADING.

3-20. Repeat operation in figure 3-1.

3-21. REMOVE/INSTALL BAYONET-KNIFE

3-22. Refer to figure 3-3.

3-22A. REMOVE/INSTALL BIPOD ASSEMBLY

3-22B. Refer to figure 3-3A.

3-23. DISASSEMBLY/ASSEMBLY.

3-24. The major groups are illustrated in figure 3-4. For disassembly / assembly refer to figure 3-5.

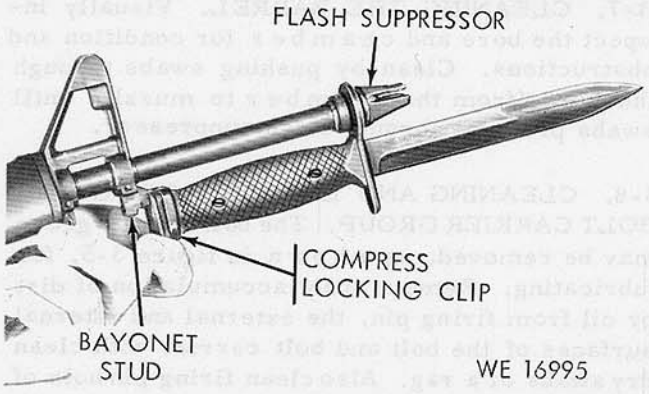

Figure 3-3. Remove/Install Bayonet-knife.

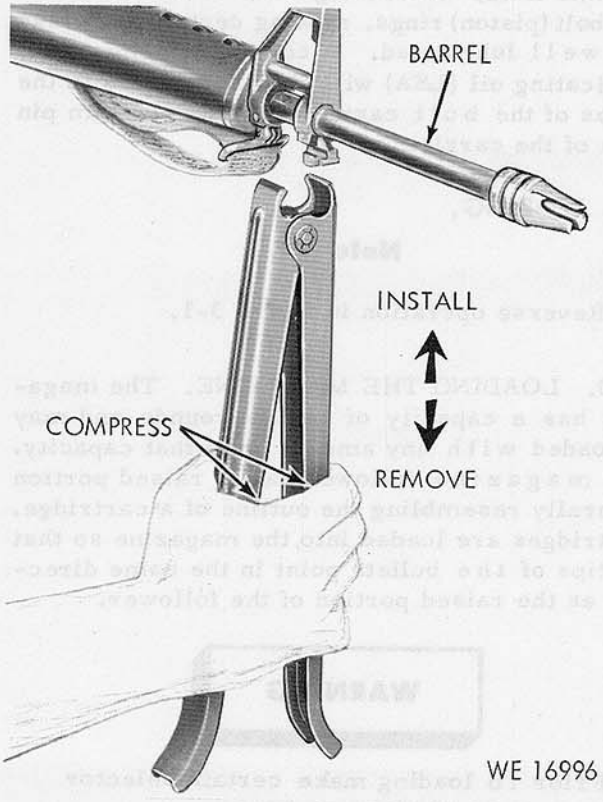

Figure 3-3A. Remove/Install Bipod Assembly.

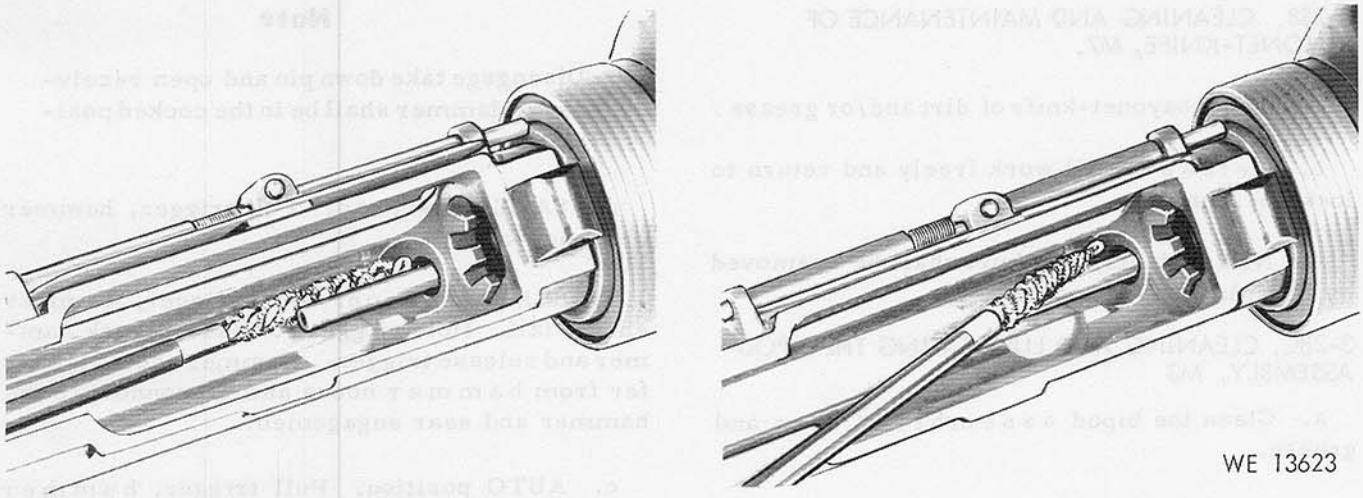

Figure 3-7C. Cleaning Gas Tube in Receiver.

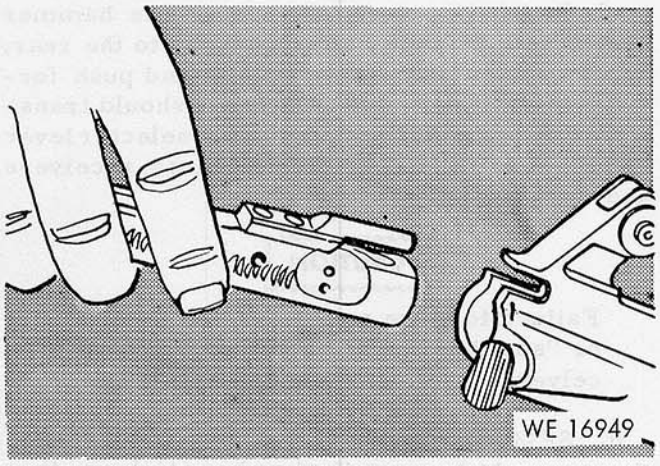

Figure 3-7D. Alinement of Carrier Key with the Gas Tube.

3-27B. ALINEMENT OF CARRIER KEY WITH THE GAS TUBE.

After thorough cleaning (figures 3-7A, 3-7B, and 3-7C) and lubrication (figure 3-7), slowly slide the carrier back and forth on the slides of the receiver to determine proper fit and alinement of the carrier key with the gas tube (figure 3-7D). Inspect for freedom of movement and complete insertion of gas tube within the carrier key. If binding occurs turn the weapon in to organizational personnel.

3-28. CLEANING AND LUBRICATING THE LOWER RECEIVER GROUP.

a. Wipe any particles of dirt from the trigger mechanism with a clean patch or brush.

b. Place a drop of oil on each of the pins for lubrication.

c. Components of the lower receiver group that are coated with carbon residue will be cleaned using solvent cleaning compound (CR) and an artist brush or similar brush. Use a scrubbing action, this will remove nearly all carbon residue and foreign material. Drain solvent cleaner from lower receiver cavity and wipe dry. Utilize the opposite end of brush with a piece of cloth wrapped around to get into the hard to get at places. After the lower receiver has been dried, a generous coat of oil should be applied to the interior and all components.

3-28A. CLEANING OF SCABBARD M8A1 AND SLING.

a. To prevent mildew, shake out and air sling and scabbard at frequent intervals. Mildewed canvas is cleaned by scrubbing with a dry brush.

b. If mildew is present, examine fabric carefully for evidence of rotting or weakening of fabric by stretching and pulling. If fabric shows indication of loss of tensile strength, turn in for replacement.

c. If water is necessary to remove dirt, it must not be used until mildew has been removed. Oil and grease may be removed by scrubbing with issue soap and water. Rinse well with water and dry.

CAUTION

At no time is gasoline or any solvent to be used to remove oil or grease from canvas. Canvas should be dried thoroughly.

3-28B. CLEANING AND MAINTENANCE OF BAYONET-KNIFE, M7.

a. Clean bayonet-knife of dirt and/or grease.

b. Release shall work freely and return to lock position.

c. Nicks, dents, and burs shall be removed by organizational support.

3-28C. CLEANING AND LUBRICATING THE BIPOD ASSEMBLY, M3

a. Clean the bipod assembly of dirt and grease.

b. Apply semi-fluid, lubricating oil (LSA) to all surfaces, making certain the tension spring is well lubricated.

c. Bipod legs shall move freely, from closed to open position, under spring tension and the spring tension shall be of sufficient strength to hold the bipod on the rifle.

3-29. FUNCTION CHECK.

Note

Remove magazine.

3-30. A complete function check of the rifle consists of checking the operation of the rifle while the selector lever is in the SAFE, SEMI, and AUTO positions. The following sequence is used for a rapid, complete check. Any portion of the check may be used alone to determine the operational condition of any specific fire selection.

Note

Disengage take down pin and open receivers. Hammer shall be in the cocked position.

a. SAFE position. Pull trigger, hammer shall not fall.

b. SEMI position. Pull trigger, hammer should fall. Hold trigger to rear, recock hammer and release trigger. Hammer should transfer from hammer hooks and disconnect to the hammer and sear engagement.

c. AUTO position. Pull trigger, hammer should fall. Hold trigger to the rear and recock the hammer. Hammer is now under the automatic sear. Still holding trigger to the rear, push forward on automatic sear. The hammer should fall. Still holding trigger to the rear, recock hammer, release trigger and push forward on automatic sear. Hammer should transfer to the sear engagement. Move selector lever to "safe" or "semi" position. Close receivers and engage take down pin.

CAUTION

Failure to move selector lever to "safe" or "semi" position before closing receivers, will damage automatic sear.

d. SEMI position. Pull the charging handle to the rear. Make certain chamber is clear, then release charging handle. Pull the trigger. Hammer should fall.

CHAPTER IV
PREVENTIVE MAINTENANCE

4-1. GENERAL.

4-2. Preventive maintenance is the systematic care, inspection, and servicing of equipment to maintain it in serviceable condition, prevent breakdowns, and assure maximum operational readiness. The operator's role in the performance of preventive maintenance service is:

a. To perform the daily service each day the rifle is operated.

b. To assist the organizational maintenance mechanics in the performance of any other scheduled periodic services specified by pertinent technical manuals.

4-3. RESPONSIBILITY.

4-4. Operators are responsible for assigned equipment. Squad, flight, or platoon leaders are charged supervisory responsibility for equipment pertaining to their commands.

4-5. SPECIFIC PROCEDURES.

4-6. Table 4-1 gives the specific procedures to be performed on the rifle and bipod assembly by the operator for each daily service.

TABLE 4-1. PREVENTIVE MAINTENANCE CHECKS AND SERVICES

Interval & Sequence No.			Operator Daily Schedule		
Before Firing	During Firing	After Firing	Item to be Inspected	Procedures	Paragraph References
1			Rifle	Wipe oil from bore and chamber.	Para. 3-7
2*			Rifle	Retract bolt to assure free movement between bolt carrier and gas tube.	Para. 3-1
3*			Rifle	Hand function to assure proper operation.	Para. 3-29
4*			Rifle	Check magazine for positive retention and functioning of bolt catch.	Para. 3-11
		5*	Rifle	Clean and lubricate. Particular attention shall be given to clean bolt carrier key.	Para. 3-25 Para. 3-27
6*			Bipod assembly	Clean and lubricate	Para. 3-28C

*Will be performed weekly if the daily schedule is not otherwise performed as a result of firing.

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CHAPTER VI
DESTRUCTION OF MATERIAL TO PREVENT ENEMY USE

SECTION I
RIFLES

6-1. GENERAL.

6-2. Destruction of the 5.56-mm rifles M16, M16A1, and bipod assembly M3 when subject to capture or abandonment in the combat zone, will be undertaken by the using arm only when, in the judgement of the unit commander concerned, such action is necessary in accordance with orders of, or policy established by, the Army Commander or Air Force Commander.

6-3. The information which follows is for guidance only. Certain of the procedures outlined require the use of explosives and incendiary grenades which normally may not be authorized items of issue to the using organization. The issue of these and related materials, and the conditions under which destruction will be affected, are command decisions in each case, according to the tactical situation. Of the several means of destructions, those most generally applicable are:

Mechanical ------ Requires axe, pick mattock, sledge, crowbar, or similar implement.

Burning --------- Requires gasoline, oil, incendiary grenades, or other flammables, or welding or cutting torch.

Demolition ------- Requires suitable explosives or ammunition. (See note.)

Gunfire---------- Includes artillery, machine guns, rifles using rifle grenades, and launchers using antitank rockets. Under some circumstances hand grenades may be used. (See note.)

Disposal -------- Requires burying in the ground, dumping in streams or marshes, or scattering so widely as to preclude recovery of essential parts.

Note

Generally applicable only when the rifle is to be destroyed in conjunction with other equipment.

In general, destruction of essential parts followed by burning will usually be sufficient to render the rifle and bipod assembly useless. However, selection of the particular method of destruction requires imagination and resourcefulness in the utilization of the facilities at hand under the existing conditions. Time is usually critical.

6-4. If destruction to prevent enemy use is resorted to, the rifle must be so badly damaged that it cannot be restored to a usable condition in the combat zone either by repair or cannibalization. Adequate destruction requires that all parts essential to the operation of the rifle, including essential spare parts, be destroyed or damaged beyond repair. However, when lack of time and personnel prevents destruction of all parts, priority is given to the destruction of those parts most difficult to replace. Equally important, the same essential parts must be destroyed on all like materiel so that the enemy cannot construct one complete unit from several damaged ones.

6-5. If destruction is directed, due consideration should be given to observance of appropriate safety precautions.

6-6. DESTRUCTION OF THE 5.56-MM RIFLES M16, M16A1, AND BIPOD ASSEMBLY, M3.

6-7. METHOD NO. 1 -- BY MECHANICAL MEANS.

6-8. Using an axe, pick mattock, sledge, or other heavy implement, destroy the rifle by smashing the receiver groups, front and rear sights, trigger and trigger guard, magazine, stock, and controls. Also bend the barrel of the rifle and cut the sling into several pieces. Also use same items to destroy the bipod assembly. Elapsed time: about 3 minutes.

6-9. METHOD NO. 2 -- BY BURNING.

a. Place the rifle and bipod assembly on a suitable pile of combustible material. Pour gasoline or oil over the rifle and bipod assembly and the combustible material. Ignite and take cover. A hot fire is required to render the rifle useless. Elasped time: about 3 minutes.

WARNING

When igniting gasoline, due consideration should be given to the highly flammable nature of gasoline and its vapor. Carelessness in its use may result in painful burns.

b. If a welding or cutting torch is available, burn through the barrel and receiver assembly of rifle. Destroy the stock and sling as described in paragraph 6-8 above. On bipod assembly burn through legs and pivot area.

6-10. METHOD NO. 3 -- BY DISPOSAL.

6-11. Bury the rifle and bipod assembly in a suitable hole or dump it into a stream. Elapsed time: about 3 minutes.

SECTION 2
GRENADE LAUNCHER

6-12. GENERAL.

a. Destruction of the grenade launcher XM148 and its ammunition when subject to capture or abandoment in the combat zone will be undertaken by the using army only when, in the judgment of the unit commander concerned, such action is necessary in accordance with orders of or policy established by the Army commander.

b. The information that follows is for guidance only. Certain of the procedures outlined require the use of explosives and incendiary grenades which may not be authorized items for the launcher. The issue of these and related materiels and the conditions under which destruction will be effected are command decisions in each case, according to the tactical situation. Of the several means of destruction, those most generally applicable are:

1. Mechanical - Requires axe, pick mattock, sledge, crowbar, or similar implement.

2. Burning - Requires gasoline, oil, incendiary grenades, or other flammables.

3. Gunfire - Includes artillery, machine guns, and launchers using high-explosive projectiles.

4. Demolition - Requires suitable explosive or ammunition.

5. Disposal - Depends upon the geographical locations, soil conditions, etc., such as loam, clay, sand, swamp, rivers, and other large bodies of water.

In general, destruction of essential parts, followed by burning will usually be sufficient to render the launcher useless. However, selection of the particular method of destruction requires imagination and resourcefulness in the utilization of the facilities at hand under existing conditions. Time is usually critical.

c. If destruction to prevent enemy use is resorted to, the launcher and related materiel must be so badly damaged that they cannot be restored to a usable condition in the combat zone either by repair or cannibalization. Adequate destruction requires that all parts essential to the operation of the launcher or related materiel, including essential parts, be destroyed or damaged beyond repair. However, when lack of time and personnel prevent destruction of all parts, priority is given to the destruction of those parts most difficult to replace. Equally important, the same essential parts must be destroyed and all like materiel so that the enemy cannot construct one complete unit from several damaged ones.

d. If destruction is directed, due consideration should be given to:

1. Selection of a point of destruction that will cause greatest hazard to the enemy, also prevent hazard to friendly troops from fragment or ricocheting projectiles which may occur incidental to destruction.

2. Observance of appropriate safety precautions.

CHAPTER VII
INSPECTIONS

SECTION 1
GENERAL

7-1. SCOPE.

7-2. This chapter provides specific instructions for the inspection by maintenance personnel of materiel in the hands of troops in the field, in maintenance shops, and in alerted units scheduled for oversea duty. Trouble shooting information is incorporated wherever applicable as a normal phase of inspection.

7-3. PURPOSE OF INSPECTION.

7-4. Inspections are made for the purpose of (1) determining the condition of an item as to serviceability, (2) recognizing conditions that would cause failure, (3) assuring proper application of maintenance policies at prescribed levels, and (4) determining the ability of a unit to accomplish its maintenance and supply missions.

7-5. CATEGORIES OF INSPECTION.

7-6. In general, three categories of inspection are performed by direct and general maintenance personnel. (Par. 7-7, 7-8 and 7-9).

7-7. INSPECTION OF MATERIEL IN THE HANDS OF TROOPS IN THE FIELD.

a. SPOT-CHECK INSPECTION. This is an inspection performed on a percentage of materiel in order to ascertain the adequacy and effectiveness of organizational maintenance and supply. Included within this scope is inspection of equipment to detect incipient failures before unserviceability occurs; inspection to ascertain the availability and use of technical and supply manuals and lubrication instructions; inspection to determine the accuracy of records, authorized levels of equipment and supplies, practice of supply economy, preservation, and knowledge of the proper procedures for requisitioning supplies and equipment and follow-up thereon.

b. COMMAND MAINTENANCE. (Army) Command maintenance inspections will be performed, at least, annually. The purpose of the inspection is to ascertain the serviceability of equipment, to predict maintenance and supply requirements, and to determine the adequacy of facilities and effectiveness of procedures. Information obtained during the inspection should indicate future requirements for maintenance and for replacement, as well as disclose immediate needs for maintenance and application of modification work orders. During inspection, correction of deficiencies will be made on the spot when practical. For additional information relative to these inspections and the forms to be used therewith, refer to AR 750-8.

7-8. SHOP INSPECTION.

a. INITIAL INSPECTION. This is an inspection of materiel received in maintenance shops for purpose of determining the degree of repair and parts requirement. This includes determination of modification work orders or TCTO's to be applied.

b. IN-PROCESS INSPECTIONS. These are inspections performed in the process of repairing the materiel, to insure that all parts conform to the prescribed repair standards, that the workmanship is in accordance with approved methods and procedures, and that deficiencies not disclosed by the initial inspection are found and corrected.

c. FINAL INSPECTION. This is an acceptance inspection performed by a final inspector after repairs have been completed, to insure that the materiel is acceptable for return to user or for return to replacement stock according to the standards established.

7-9. PREEMBARKATION INSPECTION.

7-10. This inspection is conducted on materiel in alerted units scheduled for oversea duty to insure that such materiel will not become unserviceable or worn out in a relatively short time. It prescribes a higher percentage of remaining usable life in serviceable materiel to meet a specific need beyond minimum serviceability.

SECTION 2
INSPECTION PROCEDURES

7-11. GENERAL.

7-12. The inspection procedures for the Rifles, M16, M16A1, bipod assembly and Grenade Launcher XM148 are shown in tables 8-3, 12-4 and 12-5.

WARNING

Before starting an inspection, be sure to clear the rifle and launcher. Do not actuate the trigger until the rifle and launcher have been cleared. Inspect the chamber to insure that it is empty and to see that no ammunition is in position to be introduced. Avoid having live ammunition in the vicinity of the work area.

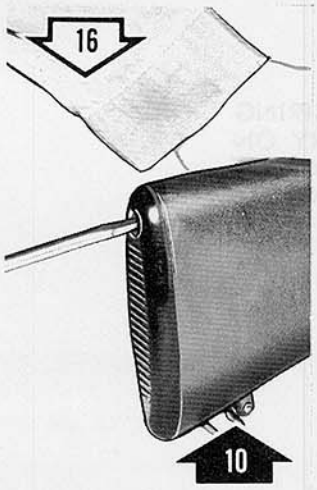
7-13. Check to see that the rifle, bipod assembly, and launcher have been cleaned of all grease, oil, dirt, or foreign matter which might interfere with proper functioning or obscure the true condition of the parts.

7-14. INSPECTION PRIOR TO DISASSEMBLY.

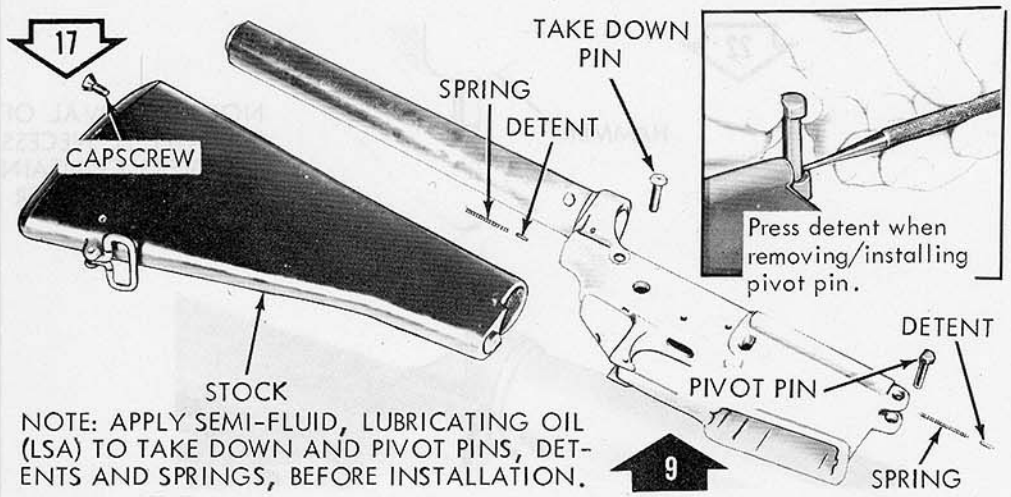
7-15. VISUAL INSPECTION. Make an overall inspection of the rifle, bipod assembly, and launcher for general appearance, condition, and operation.

7-16. INITIAL INSPECTION. Initial inspection performed upon receipt of materiel turned in for repair determines the extent of repair required and provides the basis for procuring the parts, assemblies, or supplies necessary to accomplish the repair.

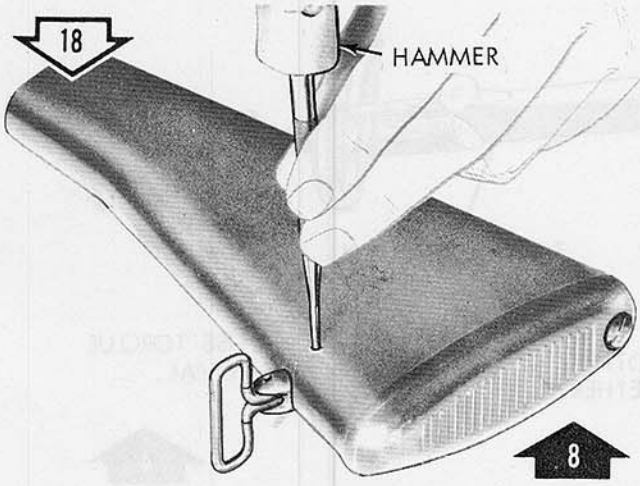
7-17. FUNCTIONAL INSPECTION. Refer to paragraphs 3-29 for rifles and bipod assembly and 12-10 through 12-17 for the launcher. Do not use live cartridges.



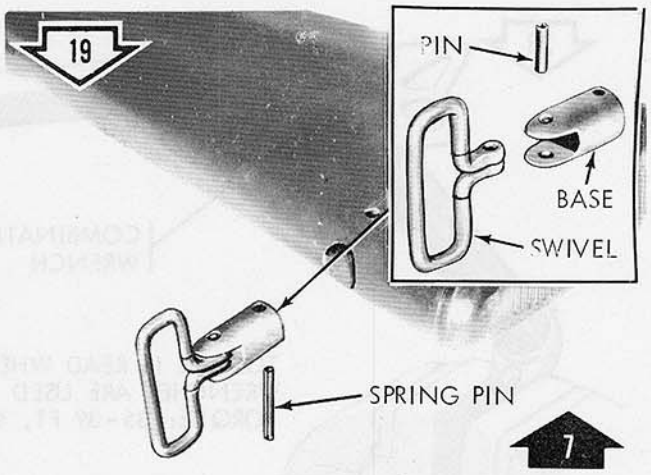
Remove/Install butt capscrew.



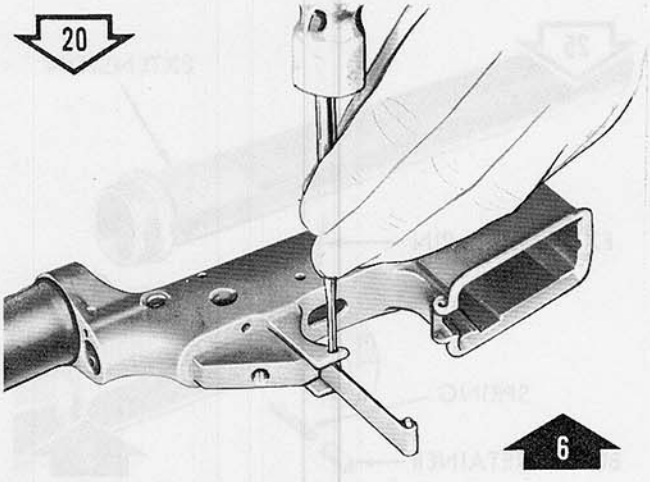
Remove/Install stock assembly, springs, detents, take down pin and pivot pin.



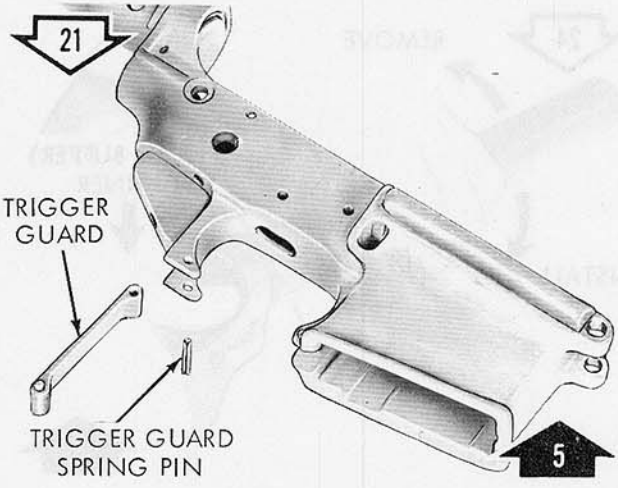
Remove/Install rear swivel spring pin.



Remove/Install spring pin, gun sling swivel and base.



Remove/Install trigger guard spring pin.



Remove/Install trigger guard.

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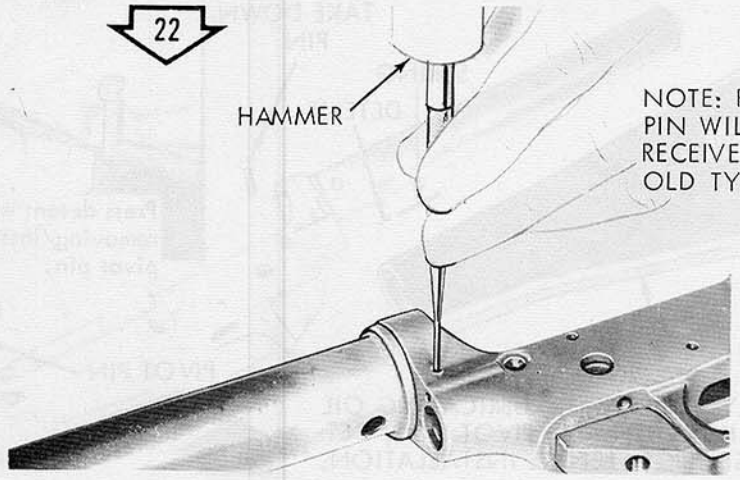
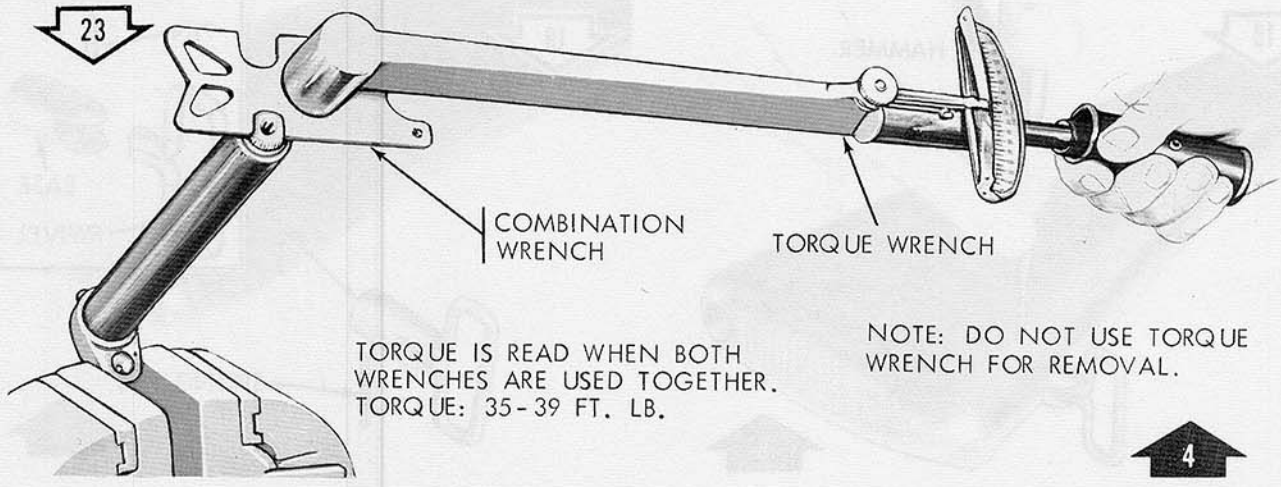
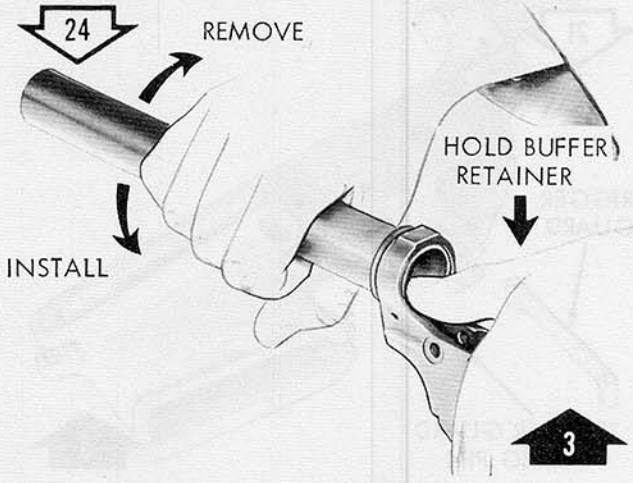
Figure 8-2. Disassembly/Assembly of Lower Receiver Group (Page 4 of 5)



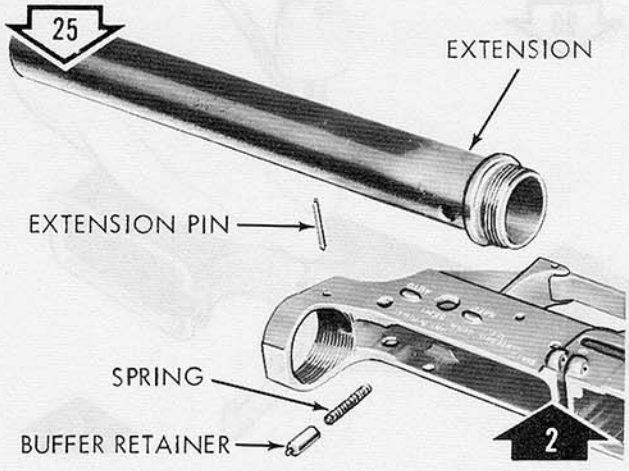
Remove lower receiver extension spring pin.



Loosen/Tighten lower receiver extension.



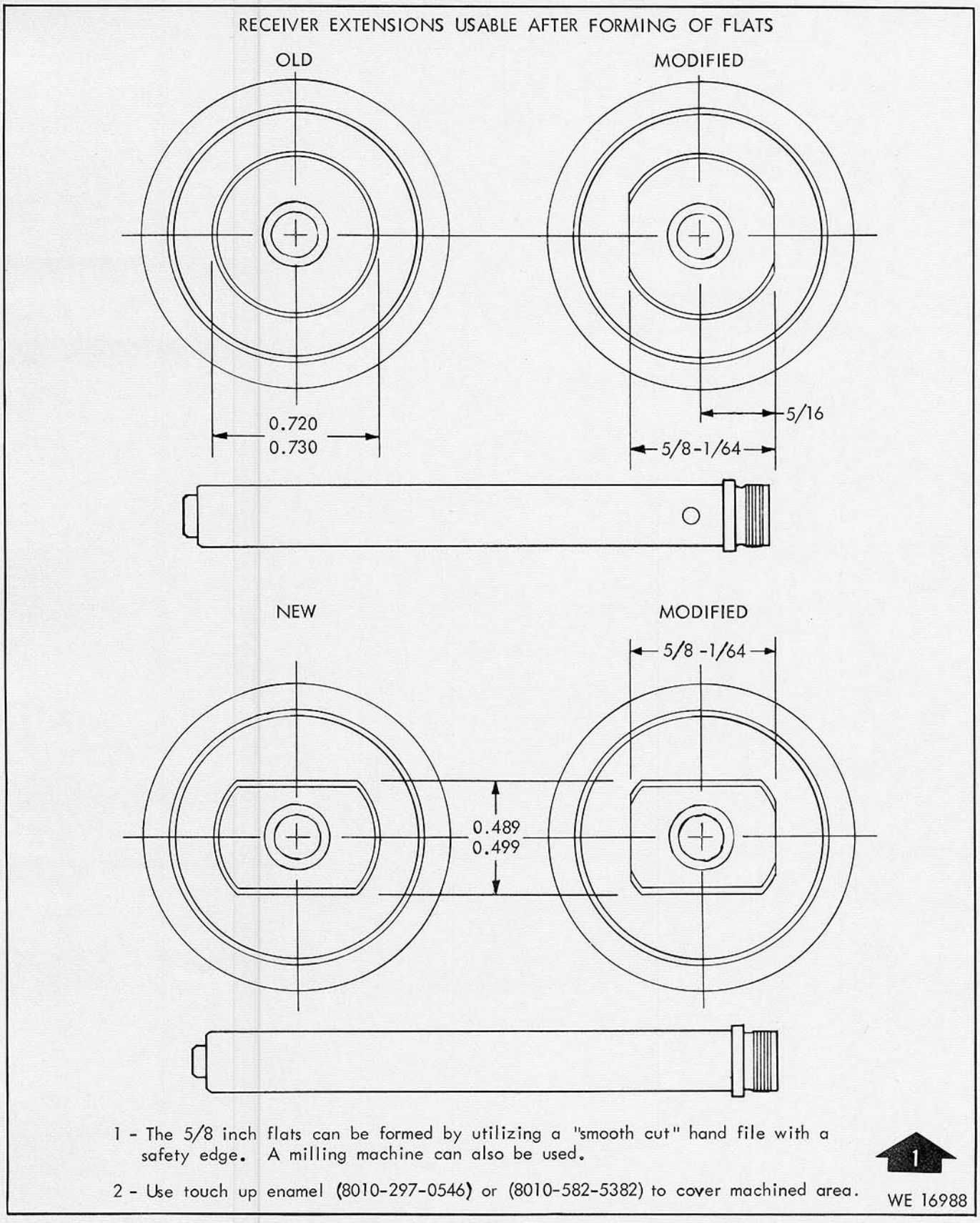
Remove/Install lower receiver extension from/to receiver.



Remove/Install buffer retainer and buffer retainer spring from/to receiver.

WE 13628A

Figure 8-2. Disassembly/Assembly of Lower Receiver Group (Page 5 of 6)



1 - The 5/8 inch flats can be formed by utilizing a "smooth cut" hand file with a safety edge. A milling machine can also be used.

2 - Use touch up enamel (8010-297-0546) or (8010-582-5382) to cover machined area.

1

WE 16988

Figure 8-2. Disassembly/Assembly of Lower Receiver Group (Page 6 of 6)

TABLE 8-3. MAINTENANCE INSPECTIONS - Continued

Inspection of materiel in the hands of troops		Direct and general support inspections		Preembarkation Inspection	Action	Ref
Spot-check	Command	Initial	In-process			
X	X	X	X	X	c. Inspect for broken bolt rings and proper spacing in ring gaps. Ring gaps are not to be in line.	(figure 3-5)
X	X	X		X	d. Inspect firing pin for wear and burs.	
X	X	X	X	X	e. Check firing pin protrusion, using gage 7799735; should be between 0.028 and 0.036.	(figure 8-6)
X	X	X		X	f. Check bolt carrier for cracks, burs, and chips.	(figure 8-1)
X	X	X	X	X	g. Check socket head capscrews. They must be staked.	
					5. BUTT STOCK AND HANDGUARD	
X	X	X		X	a. Inspect for breaks and separations of material which prevents proper retention or interference, with proper functioning of weapon.	
				X	b. Inspect for dents, cracks and chipping that would impair the functioning of components or weapon.	
					6. BIPOD ASSEMBLY	
X	X	X		X	a. Inspect the bipod legs, they shall move freely from closed to open position under spring tension. Inspect for rust. Remove rust and touch up shiney areas, using black lustrous enamel.	
X	X	X		X	b. Bipod assembly must hold securely to the rifle.	

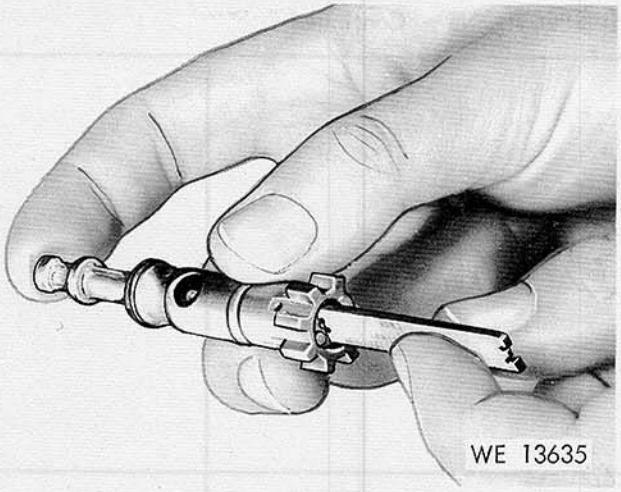


Figure 8-6. Checking Bolt with Firing Pin Protrusion Gage - 7799735

8-15. REPLACEMENT OF PARTS.

8-16. All replacement parts are interchangeable and require no adjustments when being installed in this rifle. However, to insure proper function and full reliability, the following precautions should be taken:

a. Do not interchange bolts and bolt carriers. Keep a bolt with its original bolt carrier.

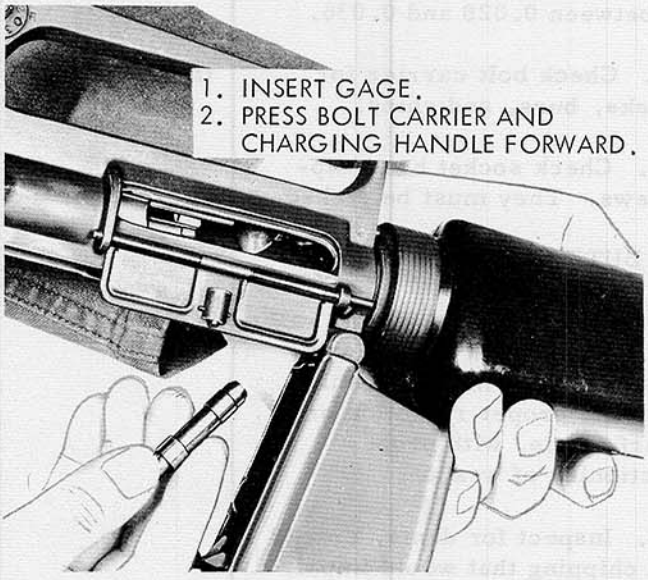
b. If replacement of either part becomes necessary, carefully check the new part to see that it fits properly, operates smoothly and that proper headspace is provided (figure 8-7).

8-17. TEST.

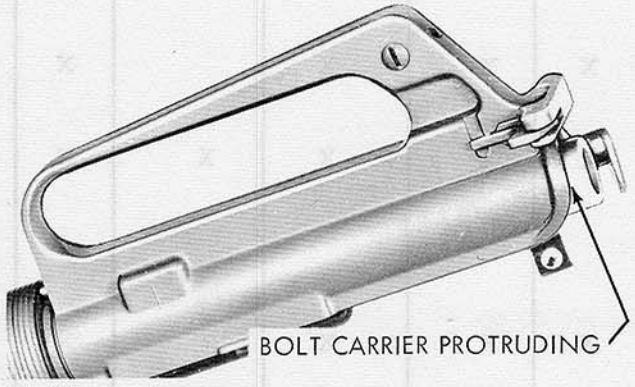
8-18. The testing of the rifle will consist of:

a. Checking headspace (figure 8-7).

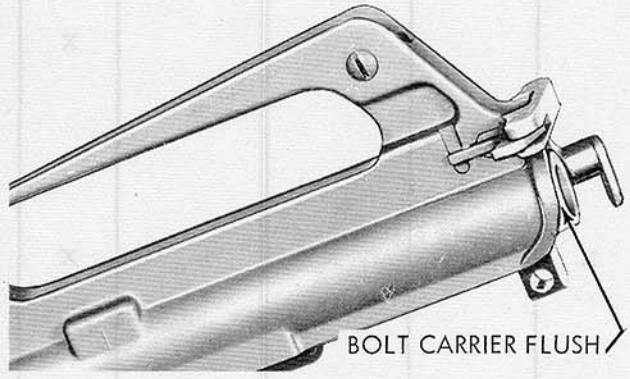
b. Function check (paragraph 3-29).



1. Inserting headspace gage.



2. Correct headspace.



3. Incorrect headspace.

WE 13636

Figure 8-7. Checking Headspace with Headspace Gage - 7799734

CHAPTER IX
BASIC ISSUE ITEMS, TOOLS, AND REPLACEMENT PARTS

9-1. GENERAL.

9-2. This chapter lists the basic issue items, tools, equipment and replacement parts for Rifles, 5.56-mm M16, M16A1, Bipod Assembly, M3, and Grenade Launcher 40-mm, XM148.

9-3. EXPLANATION OF COLUMNS.

9-4. GENERAL. The group listings are a breakdown of the equipment by physical description which is supported by illustrations.

9-5. FIGURE AND INDEX. (Column (1)).

a. The figure and index numbers are arranged numerically in the Group Assembly Parts List. The primary use of figure and index numbers is to aid in locating a part in the Group Assembly Parts List after the part has been located in the Illustration. Parts not illustrated will be marked - NI.

b. If a part number is known, the figure and index numbers are found in the Group Assembly Parts List. The index number will provide the part number and nomenclature in the Group Assembly Parts List.

9-6. SOURCE AND MAINTENANCE CODES.

a. AIR FORCE SOURCE CODE (Column (2) (a)). The explanation of source codes is as follows:

P1 - Identifies parts which may be requisitioned and installed by any maintenance level consistent with the activity's authorized scope of maintenance. This code is applied to parts on which usage is anticipated or known and which service manufacture is considered impractical.

P1D - Identifies parts which may be requisitioned and installed by USAF activities authorized depot-level maintenance only. This code is applied to parts on which usage is anticipated or known and which service manufacture is considered impractical.

P2 - Identifies insurance-type spare parts which can be installed by any USAF activity consistent with the activity's authorized scope of maintenance. This code is applied to such parts as are basically structural items of very limited usage which require special tools, templates, and/or jigs and are very difficult, impractical, or uneconomical to manufacture by USAF activities. These items are not subject to periodic replacement or wearout but may require infrequent replacement as a result of accidents or other unexpected occurrences. Delayed procurement items are included under this code.

A - Identifies items capable of being assembled at any level of maintenance and is applied to assemblies of two or more parts the majority of which are purchased and/or service manufactured.

X - Parts considered impractical for service manufacture. Code X is applied to main structure members or similar parts which, if repaired, would suggest extensive repair. The need for a part or parts coded X should normally result in a recommendation to retire the article from service.

X1 - Identifies parts applicable at any level of maintenance consistent with the activity's authorized scope of maintenance and for which it is more feasible to obtain the next higher assembly; for example, an integral detail part such as a welded segment inseparable from its assembly; a part machined in a matched set; or a part of any assembly which, if required, would suggest extensive reconditioning of such assembly. In some cases, code X1 may be used to indicate an integral detail part of an assembly which has no anticipated usage and as an assembly was source-coded "M" or "M1".

b. AIR FORCE MAINTENANCE REPAIR LEVEL CODE (Column (2) (b)). The explanation of maintenance repair level codes is as follows:

S - NO REPAIR. Identifies items which are nonreparable and have no reclamation value. When these items fail they will be disposed of at user level as condemned material.

B - NO REPAIR: RECONDITION. Identifies assemblies or parts that will be reconditioned at the user level by adjusting, cleaning, soldering broken connection, etc. If these items cannot be returned to serviceable condition by such means they will be disposed of at user level as condemned material. No repair parts or tools are specially procured for maintenance of these items.

F - FIELD LEVEL MAINTENANCE. Identifies items which will be repaired by the field level maintenance activities. Normal servicing will be done by organizational level maintenance. Selected parts, tools, and technical order data are procured and provided to applicable field level maintenance activities for repair of these items. No specialized repair activity (SRA) is established for these items. If the condition of these items is such that they cannot be returned to serviceable condition by the field level maintenance activity with authorized parts and tools, they will be disposed of as condemned material. If repair of "F" coded items cannot be accomplished due to unavailability of authorized parts, tools, or other capability, the applicable SSM/IM will be so advised with request for disposition instructions, "F" coded Hi-Value or critical items regardless of condition, will be turned into supply for disposition instructions from applicable SSM/IM.

c. ARMY SOURCE CODE (Column (2) (c)). The explanation of source codes is as follows:

P - Applies to high mortality parts.

P1 - Applies to low mortality parts.

A - Requisition components under their individual Federal stock number and assemble.

X1 - Requisition next higher assembly or component.

X - When this part fails, the end item should be turned in for replacement.

d. ARMY MAINTENANCE LEVEL (Column (2) (d)). The explanation of maintenance level code is as follows:

O - Organizational Maintenance

F - Direct Support

H - General Support

R - Items which are economically repairable at direct and general support maintenance activities and are normally furnished by supply on an exchange basis. Gages will be forwarded to gage laboratories in accordance with SB 9-75.

9-7. FEDERAL STOCK NUMBER (Column (3)). This column lists the federal stock number which has been assigned by the Cataloging Division, Defense Logistics Service Center.

9-8. DESCRIPTION (Column (4)). This column lists the Federal Item Name (shown in capital letters) and any additional description required for supply operations. The manufacturers part number is also included for reference.

9-9. UNIT OF ISSUE - DS AND GS SUPPORT (Column (5)). This column lists the package quantity to be requisitioned singly or in multiples by Army or Air Force Direct and General Support units. For requisitioning quantities other than listed refer to AR 725-50 for requisitioning procedures.

9-10. QUANTITY INCORPORATED IN UNIT (Column (6)). This column lists the quantity of each listed part incorporated in the major item. When a part is common to two or more functional groups, the quantity shown will be the total quantity for the major item. Subsequent listings of the item will refer back to the first listing of the item.

9-11. 15-DAY MAINTENANCE ALLOWANCE PER 100 EQUIPMENTS (COLUMN (7)).

a. This column lists an allowance factor which is based on the latest mortality data and is the estimated average quantity to provide maintenance and, where applicable, supply support for 100 equipments for a 15-day period under combat conditions. A decimal fraction system is used to express the allowance factors.

b. When an allowance factor is inclosed in parentheses, the item is designated as a "combat essential item of a critical nature" and must be stocked at all times, regardless of demand.

c. Since the allowance factors are based on 100 equipments, it is necessary to compute the exact quantity authorized. This quantity is determined by use of a simple mathematical formula. Resulting fractional values of 0.5 or larger will be rounded to the next higher whole number. Fractional values below 0.5 will be rounded to the next lower whole number.

Example 1: If the number of equipments supported is 30 and the allowance factor for 100 equipments is 1.9, the following formula would be used:

$$\frac{30 \times 1.9}{100} = 0.57$$

Since the resulting figure is larger than 0.5 the support would be authorized a quantity of 2.

Example 2: If the number of equipments supported is 89 and the allowance factor for 100 equipments is 3.4, the following formula would be used:

$$\frac{89 \times 3.4}{100} = 3.026$$

In this instance, the result is rounded to the next lower whole number since the fractional value is less than 0.5 and the support would be authorized a quantity of 3.

d. Additional items not expected to fail during the first year, but which may be required to perform authorized direct and general support maintenance in subsequent years, are listed with no allowance factor shown. These parts are identified by an asterisk (*) in the allowance columns and are to be requisitioned as required for immediate use only.

e. The quantity determined in accordance with (c) above represents the initial stockage for a 15-day period. Major commanders will prescribe the period of time that will be used to compute stockage for each maintenance support level.

Note

The 15-day level is not applicable to tools for direct and general support maintenance.

9-12. SUPPORT UNITS.

9-13. ORGANIZATIONAL. Organizational maintenance is that maintenance normally authorized for, performed by, and the responsibility of a using organization on equipment in its possession. This maintenance consists of functions and repairs within the capabilities of authorized personnel, skills, tools, and test equipment as prescribed in appropriate Department of the Army TOE's or TD's. Maintenance exceeding the authorized scope of maintenance may be performed when authorized by the next higher maintenance support commanders.

9-14. DIRECT SUPPORT. Direct support maintenance is that maintenance normally authorized and performed by designated maintenance activities in direct support of using organizations. This category of maintenance is limited to the repair of end items or unserviceable assemblies in support of using organizations on a return to user basis.

9-15. GENERAL SUPPORT. General support maintenance is that maintenance authorized and performed by designated TOE and TD organizations in support of the Army supply system. Normally TOE and TD general support maintenance organizations will repair or overhaul materiel to required maintenance standards in a ready to issue condition based upon applicable supported Army area supply requirements.

Note

Cannibalization of end items covered by this manual may be effected in accordance with AR 750-50 provided the provisions of AR 755-1 have been previously complied with.

(1)	(2)				(3)	(4)	(5)	(6)	(7)		
Figure and Index No.	SOURCE AND MAINT CODES				FEDERAL STOCK NO.	DESCRIPTION	Unit of Issue/DS & GS Support	Quantity Incorporated in Unit	15 - DAY MAINT ALLOW PER 100 EQUIPMENT		
	USAF		ARMY								
	(a) Source	(b) Maintenance Repair Level	(c) Source	(d) Maintenance Level					(a) Organizational	(b) Direct Support	(c) General Support
					1005-856-6885	RIFLE, 5.56-MM: M16 (USAF) (62500)					
					1005-073-9421	RIFLE, 5.56-MM: M16A1 W/E (ARMY) (8427000)					
					1005-992-6676	BIPOD ASSEMBLY: M3 (62122) (See appropriate TO&E.)					

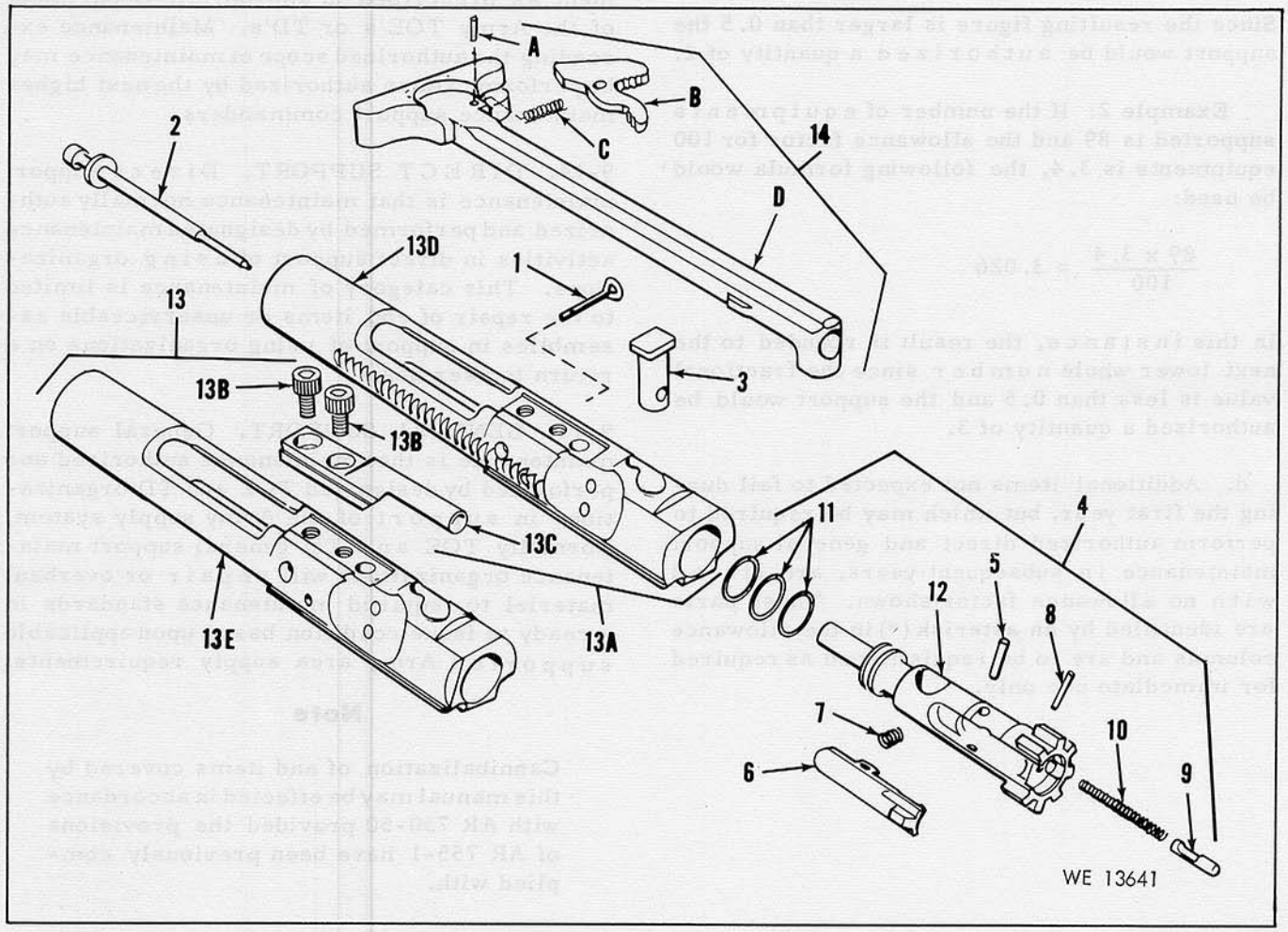


Figure 9-1. Bolt Carrier Group.

(1) Figure and Index	(2) SOURCE AND MAINT CODES USAF (a) Source	(b) Maintenance Repair Level	ARMY (c) Source	(d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-1						BOLT CARRIER GROUP					
9-1-1	P1	B	P1	O	5315-999-1509	. PIN, FIRING PIN RETAINING: (62335)	10	1	(1.0)	(0.8)	(0.2)
9-1-2	P1	B	P1	O	1005-017-9547	. PIN, FIRING: (62294)	10	1	(1.0)	(0.4)	(0.1)
9-1-3	P1	B	P1	O	1005-992-7294	. PIN, BOLT CAM: (61704)	1	1	(1.0)	(0.4)	(0.1)
9-1-4	P1D	F	P1	F	1005-992-7285	. BOLT ASSEMBLY: (62116)	1	1		(0.1)	(0.1)
9-1-5	P1	B	P1	O	1005-992-7290	. . PIN, EXTRACTOR: (61563)	10	1	(1.0)	(0.4)	(0.1)
9-1-6	P1	B	P1	O	1005-992-7288	. . EXTRACTOR, SMALL ARM CARTRIDGE: (61562)	1	1	(1.0)	(0.4)	(0.1)
9-1-7	P1	B	P1	O	1005-992-7289	. . SPRING, EXTRACTOR: (61568)	10	1	(1.0)	(0.4)	(0.1)
9-1-8	P1	B	P1	O	5315-514-2358	. . PIN, SPRING: tubular, slotted, S, phos-ctd, 1/16 nom dia, 7/16 lg (96906-16562-99)	10	1	(1.0)	(0.4)	(0.1)
9-1-9	P1	B	P1	O	1005-992-7291	. . EJECTOR, SMALL ARMS CARTRIDGE: (61564)	10	1	(1.0)	(0.2)	(0.1)
9-1-10	P1	B	P1	O	1005-992-7292	. . SPRING, EJECTOR AND SELECTOR LEVER DETENT: (61569)	10	1	(1.0)	(1.0)	(0.3)
9-1-11	P1	B	P1	F	1005-992-7287	. . RING, BOLT: (61540)	10	3		(0.4)	(0.1)
9-1-12	X1	B	X1			. . BOLT: (61538)		1			
9-1-13	A	B				. CARRIER AND KEY: M16 only (61826)		1			
9-1-13 A	A	B	A			. CARRIER AND KEY: M16 and XM16E1 (62286)		1			
9-1-13 B	P1	B	P1	F	1005-992-7284	. . . SCREW, CARRIER AND KEY: (92201)	1	2		(0.2)	(0.1)
9-1-13 C	P1	B	P1	F	1005-992-7283	. . . KEY, BOLT CARRIER: (61547)	1	1		(0.2)	(0.1)
9-1-13 D	P1	F	P1	F	1005-738-6213	. . . CARRIER, BOLT: M16 and XM16E1 (62274)	1	1		(0.1)	(0.1)
9-1-13 E	U	F				. . . CARRIER, BOLT: M16 (61544)					
9-1-14	P1	B	P1	O	1005-017-9546	. HANDLE, CHARGING: (62290)	1	1	(1.0)	(0.2)	(0.1)
9-1-14 A	P1	B	P1	F	5315-282-3642	. . . PIN, SPRING: tubular slotted, S, phos-ctd, 1/16 nom dia, 1/4 lg (96906-16562-96)	10	3		(0.1)	(0.1)
9-1-14 B	P1	B	P1	F	1005-999-0405	. . . LATCH, CHARGING HANDLE: (62289)	1	1		(0.1)	(0.1)
9-1-14 C	P1	B	P1	F	1005-999-0404	. . . SPRING, CHARGING, HANDLE LATCH: (61875)	1	1		(0.1)	(0.1)
9-1-14 D	X1	B	X1			. . . HANDLE: (62288)	1	1			

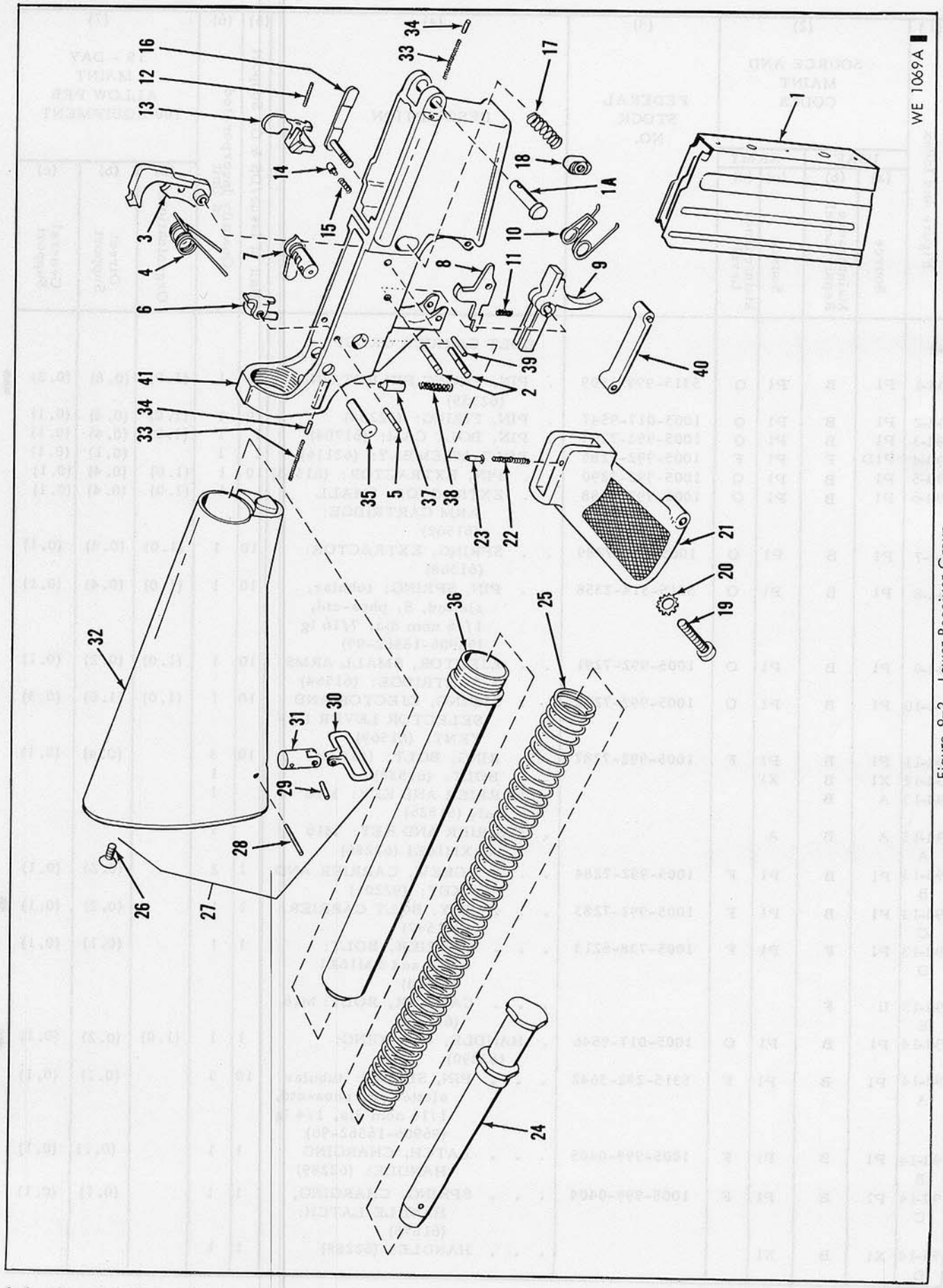


Figure 9-2. Lower Receiver Group

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(b) Maintenance Repair Level	ARMY (c) Source	(d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue /DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-2						LOWER RECEIVER GROUP					
9-2-1	P1	B			1005-056-2237	. MAGAZINE ASSEMBLY: (62103)	1	1	(1.0)	(4.0)	(2.4)
NI	P1	B			1005-992-6671	. PIN, PIVOT: early M16 (95601)	10	1		(0.2)	(0.1)
9-2-1 A	P1	B	P1	O	1005-017-9537	. PIN, PIVOT: M16 and XM16E1 (62221)	10	1	(1.0)	(0.2)	(0.1)
9-2-2	P1	B	P1	F	1005-992-7309	. PIN, HAMMER AND TRIGGER: (61654)	20	2		(0.4)	(0.1)
9-2-3	P1	B	P1	F	1005-017-9551	. HAMMER ASSEMBLY: lower receiver (62317)	1	1		(0.2)	(0.1)
9-2-4	P1	B	P1	F	1005-992-6648	. SPRING, HAMMER: (61697)	10	1		(0.2)	(0.1)
9-2-5	P1	B	P1	F	1005-992-6650	. PIN, AUTOMATIC SEAR: (61615)	10	1		(0.1)	(0.1)
9-2-6	P1	B	P1	F	1005-992-6649	. SEAR, AUTOMATIC: (61622)	1	1		(0.1)	(0.1)
9-2-7	P1	B	P1	F	1005-992-6666	. LEVER, SELECTOR: safety and firing (61959)	1	1		(0.1)	(0.1)
9-2-8	P1	B	P1	F	1005-999-0406	. DISCONNECTOR: (62334)	10	1		(0.1)	(0.1)
9-2-9	P1	B	P1	F	1005-992-7307	. TRIGGER: (61955)	1	1		(0.1)	(0.1)
9-2-10	P1	B	P1	F	1005-992-7308	. SPRING, TRIGGER: (61657)	10	1		(0.1)	(0.1)
9-2-11	P1	B	P1	F	1005-992-7311	. SPRING, DISCONNECTOR: (61925)	10	1		(0.2)	(0.1)
9-2-12	P1	B	P1	F	5315-812-3312	. PIN, SPRING: tubular, slotted, S, phos-ctd, 3/32 nom dia, 1/2 lg (96906-16562-119)	10	1		(0.1)	(0.1)
9-2-13	P1	B	P1	F	1005-017-9548	. CATCH, BOLT: (62301)	1	1		(0.1)	(0.1)
9-2-14	P1	B	P1	F	1005-056-2247	. PLUNGER, BOLT CATCH: (62178)	10	1		(0.1)	(0.1)
9-2-15	P1	B	P1	F	1005-056-2246	. SPRING, BOLT CATCH: (62177)	10	1		0.2	0.1
9-2-16	P1	B	P1	F	1005-056-2201	. CATCH, MAGAZINE: (61604)	1	1		(0.1)	(0.1)
9-2-17	P1	B	P1	F	1005-992-7301	. SPRING, MAGAZINE CATCH: (61759)	10	1		(0.1)	(0.1)
9-2-18	P1	B	P1	F	1005-992-7302	. BUTTON, MAGAZINE CATCH: (62032)	10	1		(0.1)	(0.1)
9-2-19	P1	B	P1	O	5305-912-7296	. SCREW, MACHINE: fil-hd, dld-f/lkg-wire, cres, pass-fin., 1/4-28NF-2A, 1-1/4 lg (96906-35276-284)	10	1	(1.0)	(0.1)	(0.1)
9-2-20	P1	B	P1	O	5310-527-3634	. WASHER, LOCK: external teeth, S, passivated fin., 1/4 nom size, 0.267 max id, 0.510 max od, 0.028 max thick (96906-35335-61)	1	1	(1.0)	(0.1)	(0.1)
9-2-21	P1	B	P1	O	1005-056-2250	. GRIP, PISTOL: black (62194)	1	1	(1.0)	(0.2)	(0.1)

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(b) Maintenance Repair Level	ARMY (c) Source	(d) Maintenance Repair Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-2-22	P1	B	P1	O	1005-992-7292	. SPRING, EJECTOR AND SELECTOR LEVER DETENT: (61569) See allowance under item 9-1-10	10	1			
9-2-23	P1	B	P1	F	1005-992-6667	. DETENT, SELECTOR LEVER: (61785)	10	1	(1.0)	(0.2)	(0.1)
9-2-24	P1	B	P1	F	1005-937-3078	. BUFFER ASSEMBLY: lower receiver (62339)	1	1		(0.1)	(0.1)
9-2-25	P1	B	P1	F	1005-992-6665	. SPRING, ACTION: (61581)	1	1		0.2	0.1
9-2-26	P1	B	P1	O	1005-992-6657	. SCREW, BUTT CAP: (92601)	10	1	1.0	0.1	0.1
9-2-27	P1	F	P1	O	1005-017-9549	. STOCK ASSEMBLY, MOLDED: w/swivel, black (62302)	1	1	(1.0)	(0.1)	(0.1)
9-2-28	P1	B	P1	F	5315-898-9823	. . PIN, SPRING: tubular, slotted, S, phos-ctd, 1/8 nom dia, 7/8 lg (96906-16562-131)	10	1		(0.1)	(0.1)
9-2-29	P1	B	P1	O	5315-058-6078	. . . PIN, SPRING: tubular, slotted, S, phos-ctd, 1/8 nom dia, 7/16 lg (96906-16562-126)	10	2	(1.0)	(0.4)	(0.1)
9-2-30	P1	B	P1	O	1005-017-9543	. . . SWIVEL, GUN SLING: (62280)	10	2	(1.0)	(0.2)	(0.1)
9-2-31	X1		X1			. . . BASE, SWIVEL: (62097)		1			
9-2-32	X1		X1			. . . STOCK: (62204)		1			
9-2-33	P1	B	P1	O	1005-992-6655	. SPRING, DETENT, TAKEDOWN PIN: (61692)	10	2	(1.0)	(0.2)	(0.1)
9-2-34	P1	B	P1	O	1005-992-6654	. DETENT, TAKEDOWN PIN: (61698)	10	2	(1.0)	(0.2)	(0.1)
9-2-35	P1	B	P1	O	1005-992-6653	. PIN, TAKEDOWN: (61655)	10	1	(1.0)	(0.2)	(0.1)
9-2-36	P1D	F	P1	F	1005-992-7297	. EXTENSION, LOWER RECEIVER: (61574)	1	1		0.1	0.1
9-2-37	P1	B	P1	F	1005-992-6651	. RETAINER, BUFFER: (61582)	10	1		(0.2)	(0.1)
9-2-38	P1	B	P1	F	1005-992-6652	. SPRING, BUFFER RETAINER: (61694)	10	1		(0.2)	(0.1)
9-2-39	P1	B	P1	F	5315-058-6081	. PIN, SPRING: tubular, slotted, S, phos-ctd, 1/8 nom dia, 5/8 lg (96906-16562-129)	10	1		(0.1)	(0.1)
9-2-40	P1	B	P1	F	1005-992-7299	. GUARD, TRIGGER: (61970)	1	1		(0.1)	(0.1)
9-2-41	X	D	X			. RECEIVER, LOWER: (62300)		1			

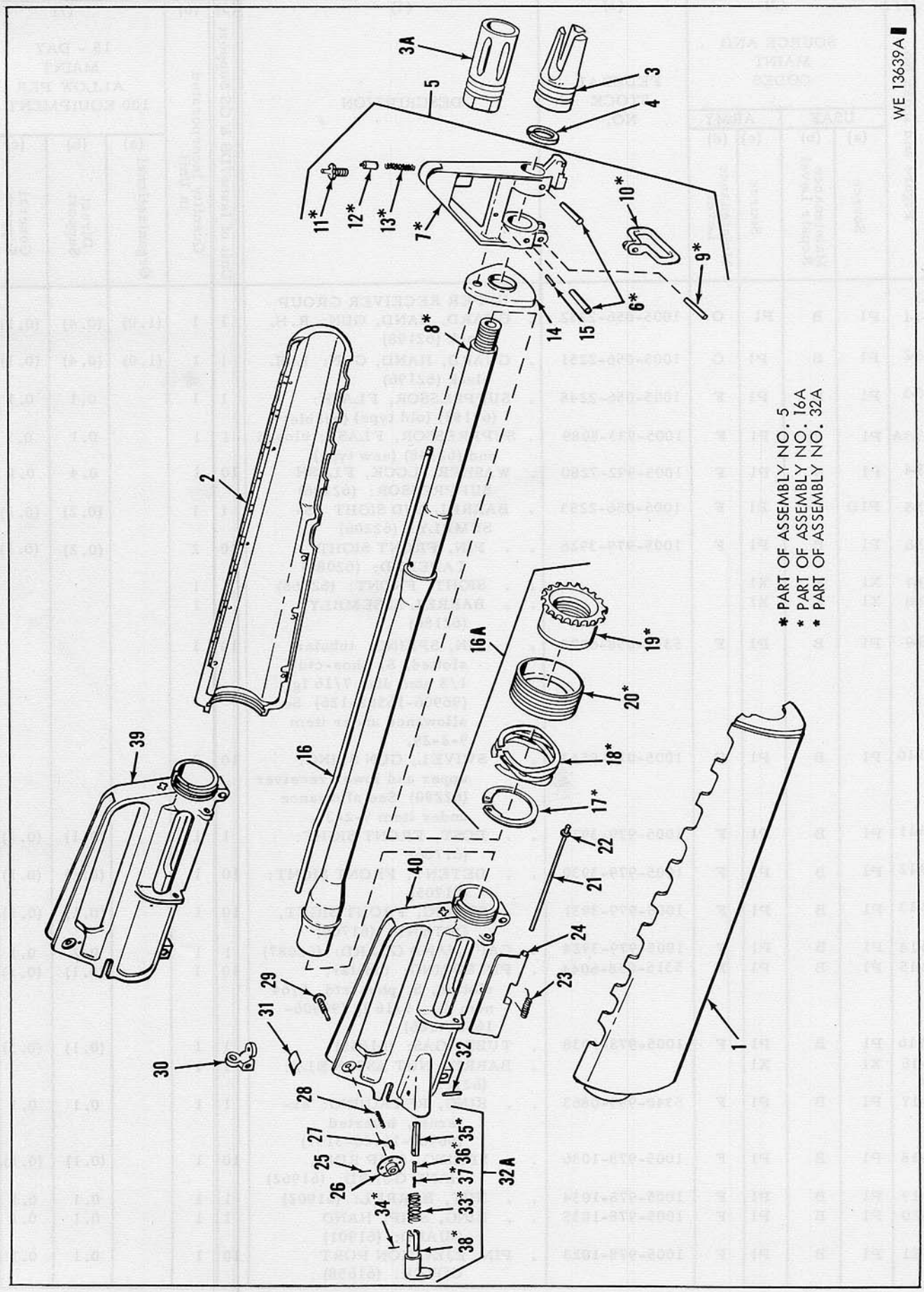


Figure 9-3. Upper Receiver Group

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(b) Maintenance Repair Level	ARMY (c) Source	(d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-3						UPPER RECEIVER GROUP					
9-3-1	P1	B	P1	O	1005-056-2252	. GUARD, HAND, GUN: R.H. black (62198)	1	1	(1.0)	(0.4)	(0.1)
9-3-2	P1	B	P1	O	1005-056-2251	. GUARD, HAND, GUN: L.H. black (62196)	1	1	(1.0)	(0.4)	(0.1)
9-3-3	P1	B	P1	F	1005-056-2248	. SUPPRESSOR, FLASH: (62182) (old type) (usable)	1	1		0.1	0.1
9-3-3A	P1	B	P1	F	1005-933-8089	. SUPPRESSOR, FLASH: closed end (62348) (new type)	1	1		0.1	0.1
9-3-4	P1	B	P1	F	1005-992-7280	. WASHER, LOCK, FLASH SUPPRESSOR: (62126)	10	1		0.4	0.1
9-3-5	P1D	F	P1	F	1005-056-2253	. BARREL AND SIGHT ASSEMBLY: (62206)	1	1		(0.2)	(0.1)
9-3-6	P1	B	P1	F	1005-979-3926	. . PIN, FRONT SIGHT, TAPERED: (62086)	10	2		(0.2)	(0.1)
9-3-7	X1	F	X1			. . SIGHT, FRONT: (62068)		1			
9-3-8	X1	F	X1			. . BARREL ASSEMBLY: (62180)		1			
9-3-9	P1	B	P1	F	5315-058-6078	. . PIN, SPRING: tubular, slotted, S, phos-ctd 1/8 nom dia, 7/16 lg (96906-16562-126) See allowance under item 9-2-29.	10	1			
9-3-10	P1	B	P1	F	1005-017-9543	. . SWIVEL, GUN SLING: upper and lower receiver (62280) See allowance under item 9-2-30.	10	2			
9-3-11	P1	B	P1	F	1005-979-3929	. . POST, FRONT SIGHT: (61706)	1	1		(0.1)	(0.1)
9-3-12	P1	B	P1	F	1005-979-3930	. . DETENT, FRONT SIGHT: (61705)	10	1		(0.1)	(0.1)
9-3-13	P1	B	P1	F	1005-979-3931	. . SPRING, FRONT SIGHT, DETENT: (61709)	10	1		(0.1)	(0.1)
9-3-14	P1	B	P1	F	1005-979-3924	. CAP, HAND GUARD: (62087)	1	1		0.2	0.1
9-3-15	P1	B	P1	F	5315-058-6044	. PIN SPRING: tubular, slotted, S, phos-ctd, 5/64 nom dia, 5/16 lg (96906-16562-106)	10	1		(0.1)	(0.1)
9-3-16	P1	B	P1	F	1005-978-1038	. TUBE, GAS: (61645)	1	1		(0.1)	(0.1)
9-3-16 A	X1		X1			. BARREL NUT ASSEMBLY: (62113)	1	1			
9-3-17	P1	B	P1	F	5340-999-0863	. . RING, RETAINING: external, inverted (96906-16626-3137)	1	1		0.1	0.1
9-3-18	P1	B	P1	F	1005-978-1036	. . SPRING, SLIP RING, HAND GUARD: (61962)	10	1		(0.1)	(0.1)
9-3-19	P1	B	P1	F	1005-978-1034	. . NUT, BARREL: (61902)	1	1		0.1	0.1
9-3-20	P1	B	P1	F	1005-978-1035	. . RING, SLIP, HAND GUARD: (61901)	1	1		0.1	0.1
9-3-21	P1	B	P1	F	1005-978-1023	. PIN, EJECTION PORT COVER: (61658)	10	1		0.1	0.1

(1)	(2) SOURCE AND MAINT CODES				(3)	(4)	(5)	(6)	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT		
	USAF		ARMY								
Figure and Index No.	(a) Source	(b) Maintenance Repair Level	(c) Source	(d) Maintenance Level	FEDERAL STOCK NO.	DESCRIPTION	Unit of Issue/DS & GS Support	Quantity Incorporated in Unit	(a) Organizational	(b) Direct Support	(c) General Support
9-3-22	P1	B	P1	F	5340-999-0864	. RING, RETAINING: ext, reduced section type, S, phos-ctd, 0.102 free id (96906-16632-3012)	10	1		0.2	0.1
9-3-23	P1	B	P1	F	1005-978-1025	. SPRING, EJECTION PORT COVER: (61518)	10	1		0.2	0.1
9-3-24	P1	B	P1	F	1005-978-1022	. COVER EJECTION PORT: (62112)	10	1		0.2	0.1
9-3-25	P1	B	P1	F	5315-282-3642	. PIN, SPRING: tubular, slotted, S, phos-ctd, 1/16 nom dia, 1/4 lg (96906-16562-96) See allowance under item 9-1-14A.	10	1			
9-3-26	P1	B	P1	F	1005-978-1029	. DRUM, REAR SIGHT WINDAGE: (61703)	1	1		0.1	0.1
9-3-27	P1	B	P1	F	1005-978-1030	. DETENT, REAR SIGHT:(61755)	10	1		(0.1)	(0.1)
9-3-28	P1	B	P1	F	1005-978-1032	. SPRING, DETENT, REAR SIGHT: (61754)	10	1		(0.1)	(0.1)
9-3-29	P1	B	P1	F	1005-978-1028	. SCREW, REAR SIGHT WINDAGE: (61702)	1	1		0.2	0.1
9-3-30	P1	B	P1	F	1005-978-1026	. SIGHT, REAR: (61700)	1	1		0.2	0.1
9-3-31	P1	B	P1	F	1005-978-1027	. SPRING, REAR SIGHT: (61708)	10	1		0.1	0.1
9-3-32			P1	F	5315-840-3812	. PIN, SPRING: tubular slotted, S, phos-ctd, 3/32 nom dia, 5/8 lg (96906-16562-121)	10	1		(0.1)	(0.1)
9-3-32 A	X1		X1			. FORWARD ASSIST ASSEMBLY: (62225)	1	1			
9-3-33			P1	F	1005-017-9541	. . SPRING, PLUNGER: XM16E1 (62271)	1	1		(0.1)	(0.1)
9-3-34			P1	F	5315-282-3642	. . PIN, SPRING: tubular, slotted, S, phos-ctd, 1/16 nom dia, 1/4 lg (96906-16562-96) See allowances under item 9-1-14A.	10	1			
9-3-35			P1	F	1005-017-9539	. . PAWL, FORWARD ASSIST: XM16E1(62269)	1	1		(0.1)	(0.1)
9-3-36			P1	F	1005-017-9540	. . DETENT, PAWL: XM16E1 (62270)	10	1		(0.1)	(0.1)
9-3-37			P1	F	1005-523-8084	. . SPRING, BOLT: XM16E1, (50381)	10	1		(0.1)	(0.1)
9-3-38			P1	F	1005-017-9538	. . PLUNGER ASSEMBLY: XM16E1 (62266)	1	1		0.1	0.1
9-3-39	P1D	F			1005-017-9550	. RECEIVER, UPPER: M16 (62306)	1	1		0.1	0.1
9-3-40			P1	F	1005-017-9542	. RECEIVER, UPPER: XM16E1 (62278)	1	1		(0.2)	(0.1)
						BIPOD ASSEMBLY, M3 (None Authorized)					

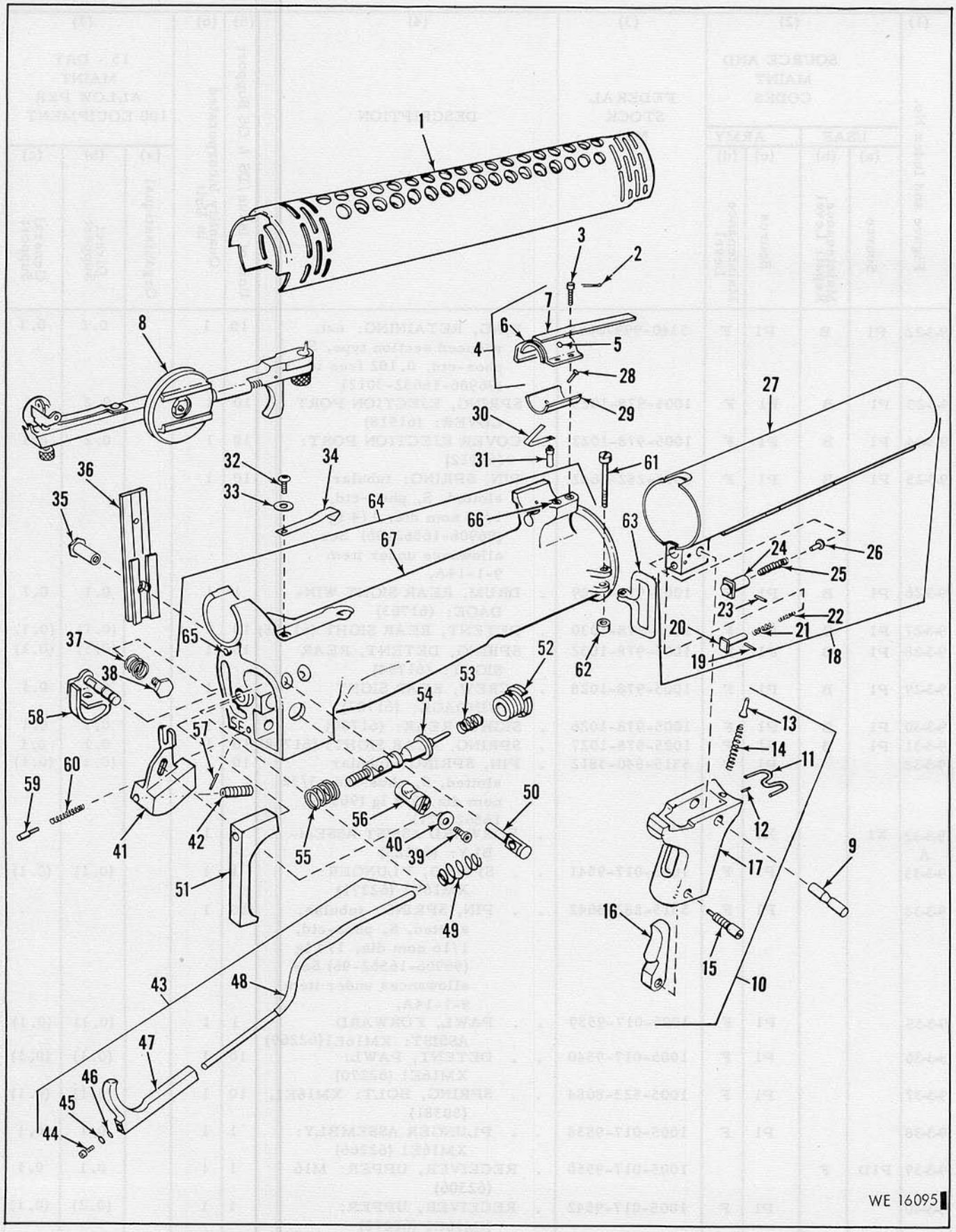


Figure 9-4. Major Groups, Assemblies and Attaching Parts.

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(b) Maintenance Repair Level	ARMY (c) Source	(d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-4-37	P1	B	P1	F	1010-918-8126	. SPRING, HELICAL, COMPRESSION: (56284)	1	1		(0.4)	(0.1)
9-4-38	P1	B	P1	F	5310-918-8105	. NUT, SIGHT SLIDE: (56285)	1	1		(0.4)	(0.1)
9-4-39	P1	B	P1	O	5305-912-4010	. SCREW, SEAR LEVER: (56247) See allowances under item 9-4-32		1			
9-4-40	P1	B	P1	O	5310-918-8100	. WASHER, SEAR LEVER, EXTRACTOR AND SIGHT: (56246) See allowances under item 9-4-33		1			
9-4-41	P1	B	P1	F	1010-918-8115	. LEVER, SEAR: (56245)	1	1		(0.4)	(0.1)
9-4-42	P1	B	P1	F	5305-999-2770	. SETSCREW: nylock, safety (56309)	1	1		(0.4)	(0.1)
9-4-43						. TRIGGER GROUP		1			
9-4-44	P1	B	P1	O	5305-912-4010	. SCREW, SEAR LEVER: (56247) See allowances under item 9-4-32		1			
9-4-45	P1	B	P1	F	1010-918-8109	. RING, TRIGGER: (56238)	1	1		(0.4)	(0.1)
9-4-46	P1	B	P1	F	1010-918-8110	. WASHER, THRUST: trigger bar (56239)	1	1		(0.4)	(0.1)
9-4-47	P1	B	P1	F	1010-918-8113	. TRIGGER: (56242)	1	1		(0.4)	(0.1)
9-4-48	P1	B	P1	F	1010-918-8112	. EXTENSION, TRIGGER: (56297)	1	1		(0.4)	(0.1)
9-4-49	P1	B	P1	O	1010-921-0581	. SPRING, HELICAL, COMPRESSION: trigger return (56317)	1	1	(1.0)	(0.4)	(0.1)
9-4-50	P1	B	P1	O	1010-918-8111	. SUPPORT, TRIGGER EXTENSION: (56240)	1	1	(1.0)	(0.4)	(0.1)
9-4-51	P1	B	P1	O	1010-999-2772	. LEVER, COCKING: (56349)	1	1	(1.0)	(0.4)	(0.1)
9-4-52	P1	B	P1	O	1010-918-6229	. RETAINER, FIRING PIN: (56216)	1	1	(1.0)	(0.8)	(0.2)
9-4-53	P1	B	P1	O	1010-918-6230	. SPRING, HELICAL, COMPRESSION: buffer (56217)	1	1	(1.0)	(0.4)	(0.1)
9-4-54	P1	B	P1	F	1010-937-0354	. PIN, FIRING: (62435)	1	1		(0.4)	(0.1)
9-4-55	P1	B	P1	O	1010-937-0355	. SPRING, HELICAL, COMPRESSION: firing pin (62436)	1	1	(1.0)	(0.4)	(0.1)
9-4-56	P1	B	P1	F	1010-918-8114	. SEAR: (56244)	1	1		(0.4)	(0.1)
9-4-57	P1	B	P1	O	5315-597-5086	. PIN, SPRING: S, phos-ctd, 0.062 nom dia, 0.375 lg (96906-16562-98) See allowances under item 9-4-19		1			
9-4-58	P1	B	P1	F	1010-999-2771	. SAFETY ASSEMBLY: (56318)	1	1		(0.4)	(0.1)
9-4-59	P1	B	P1	F	1010-918-8119	. PLUNGER, DETENT: front and rear sight and safety (56267)	1	1		(0.4)	(0.1)

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	USAF (b) Maintenance Repair Level	ARMY (c) Source	ARMY (d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
9-4-60	P1	B	P1	F	1010-937-0351	. SPRING, HELICAL, COMPRESSION: safety detent (62416)	1	1		(0.4)	(0.1)
9-4-61	P1	B	P1	O	5305-923-4261	. SCREW, FRONT SLING RETAINING: (56338)	1	1	(1.0)	(0.4)	(0.1)
9-4-62	P1	B	P1	O	5310-924-2074	. NUT, FRONT SLING RETAINING SCREW: (56339)	1	1	(1.0)	(0.4)	(0.1)
9-4-63	P1	B	P1	F	1005-017-9543	. SWIVEL, GUN SLING: upper and lower receiver (62280) See allowances under item 9-3-10					
9-4-64	X1		X1			. HOUSING ASSEMBLY: (56231)		1			
9-4-65	P1	B	P1	F	5315-918-8091	. . PIN, LOCK: rear mount (56212)	1	1		(0.4	(0.1)
9-4-66	X1		X1			. . INSERT, FRONT MOUNT SCREW: (56213)		2			
9-4-67	X1		X1			. . HOUSING: (56232)		1			

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(2) USAF (b) Maintenance Repair Level	(2) ARMY (c) Source	(2) ARMY (d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
						BASIC ISSUE ITEMS (ARMY)					
						ITEMS MAY BE REQUISITIONED AS REQUIRED FOR REPLACEMENT UNDER THEIR INDIVIDUAL STOCK NUMBERS					
1-1					1005-073-9421	RIFLE, 5.56-MM: M16A1 w/e (8427000)					
						COMPOSED OF:					
						1-RIFLE, 5.56-MM: M16A1 (62400) (w/magazine assembly)					
1-7					1005-903-1296	1-BRUSH, CLEANING, SMALL ARMS: bore (11686340)					
1-12					1005-999-1435	1-BRUSH, CLEANING, SMALL ARMS: chamber (8432358)					
1-4					1005-999-2430	1-CASE, CARRYING: bipod and cleaning equipment (2-2-246)					
1-5					1005-791-3377	1-CASE, LUBRICANT: (7790995)					
9-2-1					1005-056-2237	6-MAGAZINE ASSEMBLY: aluminum (20 cartridge capacity) (62103)					
1-6					1005-089-3994	1-ROD, CLEANING, SMALL ARMS: M11E3 (8436777)					
1-3					1005-654-4058	1-SLING, SMALL ARMS: M1 (6544058)					

(1)	(2) SOURCE AND MAINT CODES				(3)	(4)	(5)	(6)	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT		
	USAF		ARMY								
Figure and Index No.	(a) Source	(b) Maintenance Repair Level	(c) Source	(d) Maintenance Level	FEDERAL STOCK NO.	DESCRIPTION	Unit of Issue/DS & GS Support	Quantity Incorporated in Unit	(a) Organizational	(b) Direct Support	(c) General Support
12-1					1010-912-3014	LAUNCHER, GRENADE, 40-MILLIMETER: XM148, single shot rifle mounted, detachable, w/adjustable sight and extension trigger, w/e (5910329)					
						COMPOSED OF:					
						1-LAUNCHER, GRENADE, 40-MM, Complete (less sight and hand guard) (56222)					
12-2					1010-999-3401	1-CASE, CARRYING, SIGHT: (2-2-248)					
~~9-4-1~~					1010-918-6240	1-GUARD, HAND, GRENADE LAUNCHER: (56296)					
~~9-4-5~~					1010-918-8117	1-SIGHT ASSEMBLY: (56260)					
12-2					4933-999-8554	1-TOOL, COMBINATION: (8430382)					

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	USAF (b) Maintenance Repair Level	ARMY (c) Source	ARMY (d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
						TOOLS AND EQUIPMENT RIFLES, M16, M16A1 AND BIPOD ASSEMBLY, M3 ITEMS MAY BE REQUISITIONED AS REQUIRED FOR REPLACEMENT UNDER THEIR INDIVIDUAL STOCK NUMBERS					
1-7					1005-903-1296	BRUSH, CLEANING, SMALL ARMS: bore (11686340)	1		(1)	-	
1-12					1005-999-1435	BRUSH, CLEANING SMALL ARMS: chamber (8432358)	1		(1)	-	
1-4					1005-999-2430	CASE, CARRYING: bipod and cleaning equipment (2-2-246)	1		(1)	-	
1-5					1005-791-3377	CASE, LUBRICANT: (7790995)	1		(1)	-	
1-6					1005-089-3994	ROD, CLEANING, SMALL ARMS: M11E3 (8436777)	1		(1)	-	
1-3					1005-654-4058	SLING, SMALL ARMS: M1	1		(1)		
					1005-912-4248	SWAB, SMALL, ARMS CLEANING: 1000 per package (11686408)	1		(1)	-	
					4933-056-7106	TOOL SET, DIRECT AND GENERAL SUPPORT MAINTENNANCE (8426685) COMPOSED OF:	1			*	*
					4933-944-7084	1-CASE, CARRYING, GAGE, BARREL: (7799809)					
1-9				R	4933-070-9151	1-FIXTURE, BARREL REMOVER: vise jaws (11010032)					
1-13				R	4933-912-3409	1-GAGE, BARREL EROSION: (7799792)					
1-10				R	4933-070-7815	1-GAGE, FIRING PIN PROTRUSION: (7799735)					
1-11				R	4933-070-7814	1-GAGE, HEADSPACE: field type (7799734)					
1-8				R	4933-070-9152	1-WRENCH, COMBINATION: barrel nut and flash suppressor (11010033)					

(1)	(2)				(3)	(4)	(5)	(6)	(7)		
Figure and Index No.	SOURCE AND MAINT CODES				FEDERAL STOCK NO.	DESCRIPTION	Unit of Issue/DS & GS Support	Quantity Incorporated in Unit	15 - DAY MAINT ALLOW PER 100 EQUIPMENT		
	USAF		ARMY								
	(a) Source	(b) Maintenance Repair Level	(c) Source	(d) Maintenance Level					(a) Organizational	(b) Direct Support	(c) General Support
						TOOLS AND EQUIPMENT (Continued)					
						The following basic small arms Direct and General Support Maintenance tool set is authorized as required, to all Maintenance Support Units with Small Arms repair mission.					
				R	4933-775-0366	TOOL SET, DIRECT AND GENERAL SUPPORT MAINTENANCE BASIC SMALL ARMS: (8426358)	1			*	*
						Note					
						See SC 4933-95-CL-E04 for components.					
						TOOLS AND EQUIPMENT LAUNCHER, GRENADE, XM148					
12-2					1010-474-5466	BRUSH, CLEANING: M79 (7790665)	1		(1)	-	
12-2					1005-610-8828	BRUSH, CLEANING, SMALL ARMS: M6 chamber (6108828)	1		(1)	-	
12-2					1010-999-3401	CASE, CARRYING, SIGHT: (2-2-248)				-	
12-2					1010-474-5465	THONG, CLEANING BRUSH: M79 (7790631)				-	
12-2					4933-999-8554	TOOL, COMBINATION: (8430382)				-	
						DIRECT AND GENERAL SUPPORT MAINTENANCE TOOLS					
						The 15-day level is not applicable.					
12-2					4933-921-5482	WRENCH ASSEMBLY, HEXAGON SOCKET: (56306)	1			*	*
12-2					5120-920-7602	WRENCH, 7/16 OPEN END: (56258)	1			*	*

(1) Figure and Index No.	(2) SOURCE AND MAINT CODES USAF (a) Source	(2) USAF (b) Maintenance Repair Level	(2) ARMY (c) Source	(2) ARMY (d) Maintenance Level	(3) FEDERAL STOCK NO.	(4) DESCRIPTION	(5) Unit of Issue/DS & GS Support	(6) Quantity Incorporated in Unit	(7) 15 - DAY MAINT ALLOW PER 100 EQUIPMENT (a) Organizational	(b) Direct Support	(c) General Support
						CLEANING AND PRESERVING MATERIALS The following items are requisitioned as required					
					8030-980-3976	ACTIVATOR, PRIMER: grade Q (6 oz can pressure)					
					8020-244-0153	BRUSH, ARTIST: metal ferrule, flat, chisel edges, 7/16 w, 1-1/8 lg, exposed bristle					
					7920-205-2401	BRUSH, CLEANING, TOOL AND PARTS: rd 100 per cent tampico fiber, 1-1/16 at ferrule brush dia, 2-7/8 clear of block brush lg					
					6850-620-0610	CARBON REMOVING COMPOUND: 5 gal can (P-C-111A)					
					9920-292-9946	CLEANER, TOBACCO PIPE:					
						CLEANING COMPOUND, SOLVENT: Small arms bore cleaner, solution type (CR)					
					6850-224-6657	6 oz can					
					6850-224-6663	1 gal can					
					5350-221-0872	CLOTH, ABRASIVE: Crocus, ferric oxide and quartz, jean-cloth-backing, closed coating, 9w, 11 lg, 50 sh-sleeve (CA)					
					6850-281-1985	DRY CLEANING SOLVENT: (SD) (1 gal can)					
						ENAMEL: lustrous alkyd, color black (jet), 37038, TT-E-527A, (for touch-up)					
					8010-297-0546	1 qt can					
					8010-297-0547	1 gal can					

(1)	(2)				(3)	(4)	(5)	(6)	(7)		
Figure and Index	SOURCE AND MAINT CODES				FEDERAL STOCK NO.	DESCRIPTION	Unit of Issue/DS & GS Support	Quantity Incorporated in Unit	15 - DAY MAINT ALLOW PER 100 EQUIPMENT		
	USAF		ARMY								
	(a) Source	(b) Maintenance Repair Level	(c) Source	(d) Maintenance Level					(a) Organizational	(b) Direct Support	(c) General Support
					8010-582-5382	LACQUER: Black (jet) lusterless, type I, color 37038, 16 oz, aerosol can, Spec TT-L-50D, type I, nitro cellulose base					
						LUBRICATING OIL, SEMI-FLUID: MIL-L-46000A (LSA)					
					9150-889-3522	4 oz plastic bottle					
					9150-687-4241	1 qt can					
					9150-753-4686	1 gal can					
					9150-292-9689	LUBRICATING OIL, WEAPONS: (LAW) for below zero operations (1 qt can)					
						RAG, WIPING: Cotton, for general purpose use					
					7920-234-8465	5 lb bag					
					7920-205-1711	50 lb bale					
					8030-081-2326	SEALING COMPOUND: liquid, 10/25 locking torque, color code - brown (XM148 Grenade Launcher only)					
					8030-081-2341	SEALING COMPOUND: retaining, single component, anaerobic, grade AA 150/375 in. pd, locking torque, 10-15 viscosity, green color (XM148 Grenade Launcher only)					

CHAPTER X
MAINTENANCE ALLOCATION CHART

10-1. GENERAL. Indicates specific maintenance operations performed at the proper maintenance levels. Deviation from maintenance operations allocated in the chart is authorized only upon approval of the commanding officer.

10-2. MAINTENANCE FUNCTIONS. These functions are limited to and defined as follows:

INSPECT	To determine serviceability of an item by comparing its physical and mechanical characteristics with established standards.
SERVICE	To clean, preserve, and lubricate.
INSTALL	To set up for use in an operational environment such as an emplacement, site, or vehicle.
REPLACE	To replace unserviceable items with serviceable assemblies, subassemblies, or parts.
REPAIR	To restore an item to serviceable condition. This includes, but is not limited to inspection, cleaning, preserving, adjusting, replacing, welding, riveting, and strengthening.
ADJUST	To rectify to the extent necessary to bring into proper operating range.

10-3. EXPLANATION OF FORMAT.

10-4. COLUMN 1, GROUP NUMBER. Lists group numbers to identify components and assemblies.

10-5. COLUMN 2, FUNCTIONAL GROUP. Lists the noun names of groups and assemblies.

10-6. COLUMN 3, MAINTENANCE FUNCTIONS. Self-explanatory.

Note

Explanation for numbers used in this column is as follows:

NUMBER	EXPLANATION
1	Operator or Crew
2	Organizational
3	Direct Support
4	General Support

10-7. COLUMN 4, TOOLS AND EQUIPMENT. Tools and equipment which are required to perform the designated function.

10-8. COLUMN 5, REMARKS. Self-explanatory.

MAINTENANCE ALLOCATION CHART
FOR
RIFLES, 5.56-MM, M16, M16A1 AND BIPOD ASSEMBLY, M3

(1)	(2)	(3) MAINTENANCE FUNCTION											(4)	(5)
GROUP NO.	FUNCTIONAL GROUP	INSPECT	TEST	SERVICE	ADJUST	ALIGN	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD	TOOLS & EQUIP.	REMARKS
1	Magazine Assembly	1	-	1	-	-	-	1	1	3	-	-		
2	Bolt Carrier Group	2	-	1	-	-	-	1	3	2	-	-		
3	Upper Receiver Group	2	-	1	-	-	-	3	3	2	-	-		
4	Barrel and Front Sight Assembly	2	-	1	1	-	-	3	3	3	-	-		
5	Rear Sight	2	-	1	1	-	-	3	3	3	-	-		
6	Hand Guard Assembly	2	-	1	-	-	-	1	2	-	-	-		
7	Lower Receiver Group	2	-	1	-	-	-	-	3	*2	-	-		
8	Stock Assembly	2	-	1	-	-	-	2	2	3	-	-		
9	Bipod Assembly	2	-	1	-	-	-	1	3	3	-	-		

*Pistol grip and retainer screw only.

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