U.S. MARINE CORPS TECHNICAL MANUAL

OPERATOR'S MANUAL WITH COMPONENTS LIST

FOR RIFLE, 7.62 MM, FN FAL, NSN: 1005-LL-MUS-2807 P/N TBD



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FOR OFFICIAL USE ONLY

MARCH 2010 PCN 184 837002 00



DEPARTMENT OF THE NAVY Headquarters, U.S. Marine Corps Washington, DC 20380-0001

31 March 2010

- 1. This Technical Manual (TM), authenticated for Marine Corps use and effective upon receipt, provides information on the Rifle, 7.62 mm, FN FAL, NSN: 1005-LL-MUS-2807.
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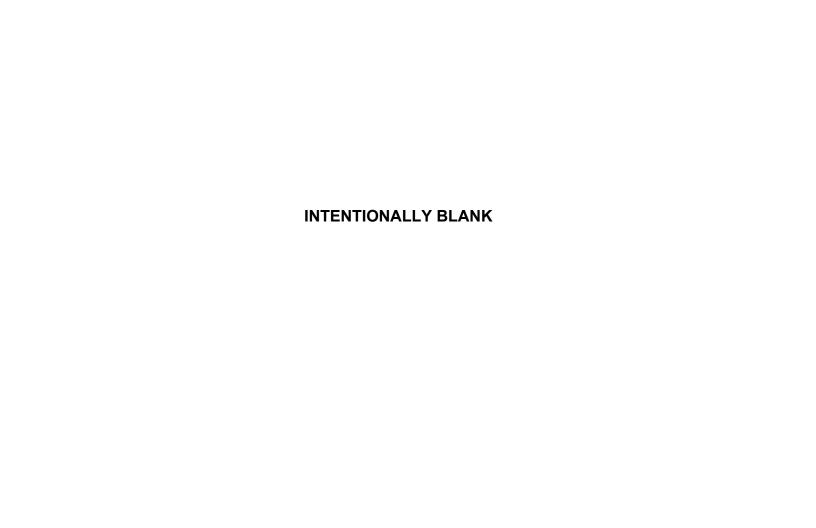
LIST OF EFFECTIVE PAGES/WORK PACKAGES

Date of issue for original manual is: 31 March 2010.

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 24 AND TOTAL NUMBER OF WORK PACKAGES IS 20 CONSISTING OF THE FOLLOWING:

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WARNING SUMMARY

This warning summary contains safety warnings that must be understood and applied during operation and maintenance of this equipment. Failure to observe these precautions could result in serious injury or death to personnel.

WARNING

Check the bore to ensure it is clean and free of obstruction. Failure to following this warning may result in injury or death to personnel.

WARNING

During loading operations, the rifle should be kept on SAFE.

WARNING

Firing long, sustained bursts may cause "cookoff." This can cause serious injury or death to personnel. Failure to follow this warning may cause injury or death to personnel.

WARNING

If the weapon is dropped or jarred with a loaded magazine in place, it could chamber a round. Failure to follow this warning may cause injury or death.

WARNING

If a noticeable difference in sound or recoil of the weapon is experienced, stop firing. Either condition could indicate an incomplete powder burn or a projectile lodged in the bore.

WARNING

If the weapon stops firing with a live round in the chamber of a hot barrel, remove the round immediately. If the round cannot be removed within 10 seconds, wait 15 minutes with the weapon pointed in a safe direction. This will avoid possible injury to personnel from the cook-off of the chambered round. Keep the face away from the ejection port while clearing a hot chamber. Failure to follow these warnings may result in injury or death to personnel.

WARNING

Immediately cease fire if an audible popping sound or reduced recoil is experienced during firing. DO NOT apply immediate action. DO NOT attempt to remove a projectile that is lodged in the barrel. Notify the unit armorer. Failure to follow these warnings may result in injury or death to personnel.

WARNING

Store ammunition under protective cover and away from excessive heat and extreme temperatures. Failure to follow this warning may result in injury or death to personnel.

WARNING

DO NOT attempt to disassemble a cartridge or any of its components. DO NOT polish brass components of cartridges. Failure to follow this warning may result in injury or death to personnel.

WARNING

Use only authorized ammunition manufactured to U.S. or NATO specifications.

WARNING

DO NOT fire seriously corroded ammunition, dented cartridges, cartridges with loose projectiles, cartridges exposed to extreme heat (135°F) until they are cooled, or cartridges with loose projectiles are pushed in (short rounds). Failure to follow these warnings may result in injury or death to personnel.

WARNING

DO NOT fire the weapon if water is present in the barrel. Failure to follow this warning may result in injury or death to personnel.

WARNING

Confirm the weapon is unloaded and on SAFE before performing the following procedures. Failure to follow this warning may result in injury or death to personnel.

WARNING

Confirm the weapon is unloaded, clear, and on SAFE before performing the following procedures. Do not keep live ammunition near the work area. Failure to follow these warnings may cause injury or death to personnel.

WARNING

Do not interchange bolt assemblies from one weapon to another. Failure to adhere to this warning may result in injury or death to personnel or damage to the weapon.

WARNING

Confirm the weapon is clear and on SAFE before performing the following procedures. Failure to follow this warning may result in injury or death to personnel.

WARNING

Ensure the weapon is clear and on SAFE before performing these procedures. Failure to follow this warning may cause injury or death.

WARNING

The firing pin is under spring tension.

WARNING

The gas plug is under spring tension.

WARNING

DO NOT store the weapon with live ammunition in either the chamber or magazine. Always assume that every weapon is loaded until it is determined through visual and physical inspection that it is not loaded. Refer to WP 0005 00 for clearing or unloading procedures. Failure to follow these warnings may cause injury or death to personnel.

CAUTION SUMMARY

CAUTION

The use of oil or grease on cartridges is prohibited.

CAUTION

Areas with hot, dry climates usually contain blowing sand and fine dust. Deserts can be hot during daylight hours and freezing during hours of darkness. This will severely tax the weapon as well as other types of equipment. The weapon's continued operation will depend on strictly and routinely following detailed cleaning and lubricating procedures.

CAUTION

Do not dry clean the weapon. Do not use hot water or other solvents to clean the weapon. This will remove the teflon lubricant built up as a result of using CLP.

CAUTION

Apply only a light coat of CLP to the firing pin and firing pin hole in the bolt.

CAUTION

Do not mix lubricants on the same weapon. The weapon must be cleaned thoroughly during any change from one lubricant to another. Dry cleaning solvent (SD) is recommended for cleaning before changing lubricants.

CAUTION

Ensure the swab goes completely through the compensator. Do not reverse the direction while the swab is in the bore or compensator.

CAUTION

When using the bore brush, do not reverse direction while the brush is in the bore.

CAUTION

Do not remove the inner heat shield.



TECHNICAL MANUAL TM 8370-50127-OR/21

MARINE CORPS SYSTEMS COMMAND Quantico, VA, MARCH 2010

U.S. MARINE CORPS TECHNICAL MANUAL OPERATOR'S MANUAL WITH COMPONENTS LIST

FOR

RIFLE, 7.62 MM, FN FAL, NSN: 1005-LL-MUS-2807 P/N TBD

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HOW TO USE THIS MANUAL

INTRODUCTION

- 1. This manual contains operating instructions, maintenance instructions, troubleshooting procedures, and supporting information for the FN FAL rifle. It is divided into five chapters.
- 2. This manual is written in work package format:
 - a. Chapters divide the manual into major categories of information (e.g., *General Information*, *Equipment Description and Data, and Principles of Operation*).
 - b. Each chapter is divided into work packages, which are identified by a 6-digit number (e.g., 0001 00, 0002 00) located at the upper right-hand corner of each page. The work package page number (e.g., 0001 00-1, 0001 00-2) is located centered at the bottom of each page.
 - c. If a Change Package is issued to this manual, added work packages will use the 5th and 6th digits of their numbers to indicate new material. For instance, work packages inserted between WP 0001 00 and WP 0002 00 are numbered WP 0001 01, WP 0001 02, etc.
- 3. Read through this manual to become familiar with its organization and contents before attempting to operate or maintain the weapon.

CONTENTS OF THIS MANUAL

- 1. A *Warning Summary* and *Caution Summary* are located at the beginning of this manual. Become familiar with these warnings and cautions before operating or maintaining the equipment.
- 2. A *Table of Contents*, located in the front of this manual, lists all chapters and work packages in the publication. If you cannot find what you are looking for in the *Table of Contents*, refer to the alphabetical *Index* at the back of the manual.
- 3. Chapter 1, *General Information, Equipment Description and Data, and Principles of Operation*, provides general information about the equipment, identifies the major components and systems, and describes how the components and systems work.
- 4. Chapter 2, *Operator Instructions*, identifies operating controls and indicators and explains how to use them. It also shows how to operate the FN FAL rifle under usual and unusual conditions.
- 5. Chapter 3, *Troubleshooting*, provides symptoms and procedures pertaining to failures that could occur during operation of the FN FAL rifle.
- 6. Chapter 4, *Maintenance Instructions*, provide procedures to maintain the FN FAL rifle at the operator level.
- 7. Chapter 5, *Supporting Information*, provides information pertaining to references, components listing, and an expendable and durable items list.
- 8. An alphabetical *Index* is located at the back of this manual.

FEATURES OF THIS MANUAL

- 1. This manual contains information on operating and maintaining the FN FAL rifle.
- 2. WARNINGS, CAUTIONS, NOTES, subject headings, and other important information are highlighted in **BOLD** print as a visual aid.

WARNING

A WARNING indicates a hazard which may result in injury or death to personnel.

CAUTION

A CAUTION is a reminder of safety practices or directs attention to usage practices that may result in damage to equipment.

NOTE

A NOTE is a statement containing information that will make the procedures easier to perform.

3. Statements and words of particular interest may be printed in CAPITAL LETTERS to create emphasis.

- 4. Within a procedural step, reference may be made to another chapter or work package in this manual or to another manual. These references indicate where you should look for more complete information. If you are told: "Attach the patch holder to the cleaning rod and insert a patch in the patch holder (WP 0013 00)", go to WP 0013 00 in this manual for instructions.
- 5. Illustrations are placed after, and as close to, the procedural step to which they apply. Callouts placed on art are text or numbers.

END OF WORK PACKAGE



CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND DATA, AND PRINCIPLES OF OPERATION



GENERAL INFORMATION

SCOPE

- 1. **Type of Manual**. This manual contains operating and maintaining instructions for the 7.62 x 51 mm, FN FAL rifle.
- 2. Equipment Name and Model Number. FN FAL rifle.
- 3. **Procedures**. There are different models of the FN FAL rifle. Only one model is depicted in this manual, but procedures are common to most models.

MAINTENANCE FORMS, RECORD PROCEDURES, AND REPORTS

The Marine Corps forms and record procedures used for equipment maintenance will be those prescribed in the current edition of TM 4700-15/1, *Ground Equipment Record Procedures*.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control (CPC) of weapons material is a continuing concern. While corrosion is typically associated with rusting metal, it can also include the deterioration of other items such as contacts, injection molded plastics, wood, and foam inserts in the case. Unusual cracking, softening, swelling, or breaking of these or other materials may be signs of corrosion.

GENERAL INFORMATION - CONTINUED

DESTRUCTION OF MATERIAL TO PREVENT ENEMY USE

To render the equipment useless to the enemy, U.S. Marine Corps personnel shall destroy the equipment by weapons fire, smashing, disassembly, burning, or other means.

ABBREVIATION/ACRONYM LIST Definition BZO Battle Sight Zero bkBook ea......Each fps Feet per Second Foot/Feet Foot/Feet LAW Lubricating Oil, Arctic, Weapons Pound LSA Lubricant, Semi-Fluid, Automatic Weapons m Meter mL......Milliliter

GENERAL INFORMATION - CONTINUED

ABBREVIATION/ACRONYM LIST - CONTINUED	Definition
mm	Millimeter
N/A	
NSN	
pg	Package
PMCS	Preventive Maintenance Checks and Services
POI	point of aim
psi	Pounds per Square Inch
rds/min	Rounds per Minute
ROD	
RPL	Repair Parts List
SD	
SF	
SFL	
TB	Technical Bulletin
U/M	Unit of Measure

END OF WORK PACKAGE



EQUIPMENT DESCRIPTION AND DATA

GENERAL DESCRIPTION

- 1. The FN FAL rifle is a 7.62 mm, lightweight, air-cooled, gas-operated, magazine-fed, shoulder-fired weapon that can be fired in either semi-automatic or full automatic fire.
- 2. The weapons have positive locking of the bolt. The firing pin is part of the bolt and breech block assembly and cannot strike the primer until the bolt is fully locked.
- 3. Other features include:
 - a. The handguard and buttstock could be made of wood, plastic, or metal.
 - b. There are different styles of handguards and compensators.
 - c. May have optical sight mounts.
 - d. Some models have a folding buttstock.
 - e. Squad automatic weapon models have longer, heavier barrels, bipods, and no handguards.

EQUIPMENT DESCRIPTION AND DATA - CONTINUED

DESCRIPTION OF MAJOR COMPONENTS

- 1. <u>Breech Block and Bolt Assembly</u>. Provides the feeding chambering, locking, firing, extraction of cartridges. Includes the breech block and bolt assembly. The bolt assembly includes the bolt, extractor, and firing pin.
- 2. <u>Upper Receiver and Barrel Assembly</u>. Includes the top cover, ejection port, magazine release, bolt catch, gas piston group, carrying handle, auto sear, breech block and bolt assembly. The rifle barrel is air-cooled and carries the compensator, front sight assembly; front sling swivel, and two handguards.
- 3. <u>Lower Receiver and Buttstock Assembly</u>. Contains the hammer, trigger, disconnector, selector lever, pistol grip, rear sight assembly, and buttstock assembly. The buttstock assembly houses the action spring and extension assembly.
- 4. **Magazine**. Has a 20 cartridge capacity.
- 5. <u>Takedown Screw and Axle</u>. In conjunction with the takedown latch, located on the lower receiver, the takedown screw and axle secure both receivers.

EQUIPMENT DESCRIPTION AND DATA - CONTINUED

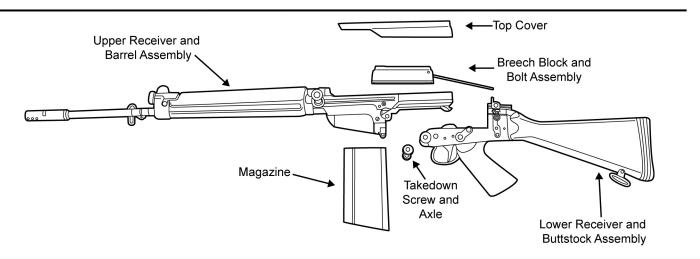


Figure 1. Major Components of the FN FAL.

EQUIPMENT DESCRIPTION AND DATA - CONTINUED

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

Table 1. FN FAL Characteristics.

FN FAL		
Caliber	7.62 x 51 mm NATO (.308 in.)	
Weight:		
Rifle Empty	Approx 9.53 lbs (4.325 kg)	
Fully Loaded Magazine	Approx 1.6 lbs (730 g)	
Length:		
Rifle	Approx 40 in. (1,090 mm)	
Barrel	Approx 21 in. (533 mm)	
Cartridge	Approx 2.8 in. (71 mm)	
Barrel Rifling	Barrel Rifling 4 grooves, right-hand twist, pitch is 1 in 12 in. (1 in	
	305 mm)	
Magazine Capacity	20 rounds	
Rear Sight	Adjustable, 200-600m in 100m increments	
Maximum Effective Range	500 m	
Cyclic Rate of Fire	650-700 rds/min	
Operational Rate of Fire	60 rds/min	
Muzzle Velocity	2,154 fps (840 m/s)	

END OF WORK PACKAGE

PRINCIPLES OF OPERATION

SEMI-AUTOMATIC

- 1. <u>Cycle of Operation</u>. The cycle of operation is similar for all small arms. Knowledge of the cycle of operation will help the operator understand the cause of and remedy for various stoppages.
- 2. **<u>Eight Steps</u>**. The cycle of operation contains eight steps:
 - a. Feeding
 - b. Chambering
 - c. Locking
 - d. Firing
 - e. Unlocking
 - f. Extracting
 - g. Ejecting
 - h. Cocking

PRINCIPLES OF OPERATION - CONTINUED

- 3. **<u>Description of Eight Steps.</u>** These eight steps are explained below with a brief description of what occurs inside the rifle during each step. Assume that a full magazine is loaded in the rifle and the bolt is to the rear.
 - a. <u>Feeding</u>. As the bolt moves forward, the bottom of the bolt passes above the lips of the magazine, strips the cartridge from the magazine, and pushes it into the chamber.
 - b. <u>Chambering</u>. Chambering is completed when the cartridge is fully seated in the chamber and the extractor is engaged in the extraction groove at the base of the cartridge.
 - c. <u>Locking</u>. The front of the breech block contacts the rear portion of the barrel; the cartridge is chambered and the base is seized by the extractor. The recesses of the breech block act on the bolt forcing its rear end downward, causing it to engage in the locking shoulder of the upper receiver. The mechanism is now locked.
 - d. <u>Firing</u>. When the trigger is pulled, this allows the hammer to rotate forward under the expanding energy of the hammer spring. The hammer strikes the firing pin, pushing it forward through the face of the bolt, striking the primer of the round, and detonating the cartridge.
 - e. <u>Unlocking</u>. When the cartridge is fired, the bullet is driven through the barrel by the expanding powder gas. As the bullet passes the gas port, some gas is forced through the gas regulator and then into the gas cylinder. The piston is projected to the rear striking the breech block slide, which is driven rearward. After recoiling a few millimeters, the recesses of the breech block act on the rear of the bolt lifting it out of engagement with the locking shoulder of the upper receiver.

PRINCIPLES OF OPERATION - CONTINUED

- f. **Extracting**. As the bolt moves to the rear, the extractor holds the base of the cartridge case against the bolt. Extraction is completed when the front of the cartridge case clears the rear of the chamber.
- g. <u>Ejecting</u>. As the bolt moves to the rear, the empty cartridge case is held by the extractor. The base of the cartridge strikes the fixed ejector in the upper receiver. The extractor serves as a pivot point for the cartridge, which is deflected out of the ejection port of the receiver. The extractor and ejector are both needed to complete ejection.
- h. <u>Cocking</u>. As the bolt moves to the rear, the breech block overrides the hammer. This action forces the hammer to rotate to the rear until it is engaged by the auto sear. When the trigger is released, the trigger engages the hammer, holding the hammer to the rear.

AUTOMATIC

- 1. <u>Cycle of Operation</u>. The cycle of operation is similar to semi-automatic operation, with some minor differences in operation due to differences in internal fire control components. Knowledge of what happens during the cycle of operation will help the operator understand the cause of and remedy for various stoppages.
- 2. <u>Eight Steps</u>. The automatic cycle of operation contains the same fundamental eight steps as the semi-automatic.

PRINCIPLES OF OPERATION - CONTINUED

- 3. **<u>Description.</u>** With the selector lever in the AUTO position, the weapon will fire repeatedly as long as the trigger is held or until the magazine empties. This is accomplished through the use of an auto sear that momentarily holds the hammer rearward until the bolt has fed, chambered, and locked on the next round.
 - a. The trigger is pulled and held, releasing the hammer, which fires the first round.
 - b. As the bolt moves rearward, the hammer is forced to the rear and is caught by the auto sear.
 - c. As the bolt returns to the locked position, the auto sear releases the hammer and the next round is fired.
 - d. The sequence repeats as long as the trigger is held rearward or the magazine empties.
 - e. The cycle of operation will stop when the trigger is released and the hammer is caught by the disconnector.

END OF WORK PACKAGE

CHAPTER 2

OPERATOR INSTRUCTIONS



GENERAL

This section describes the various controls and provides sufficient information to ensure the proper operation of the 7.62 mm FN FAL rifle.

OPERATOR CONTROLS AND INDICATORS

Right Side View. Refer to Figure 1.

- 1. **Front Sling Swivel**. Allow the operator to attach a sling to the weapon.
- 2. **Handguards**. Protect the operator's hands from the heat of barrel while in use.
- 3. <u>Carrying Handle</u>. The carrying handle allows the operator to carry the rifle.
- 4. **Ejection Port**. Allows empty cartridges to exit the rifle.
- 5. <u>Takedown Screw and Axle</u>. In conjunction with the takedown latch on the lower receiver, they secure the lower and upper receivers to each other.
- 6. <u>Magazine</u>. Contains up to 20 rounds of ammunition.
- 7. <u>Magazine Release</u>. Allows the operator to release the magazine to remove it from the weapon.
- 8. <u>Trigger</u>. Fires the weapon when pulled.
- 9. **Rear Sling Swivel**. Allows the operator to attach a sling to the weapon.

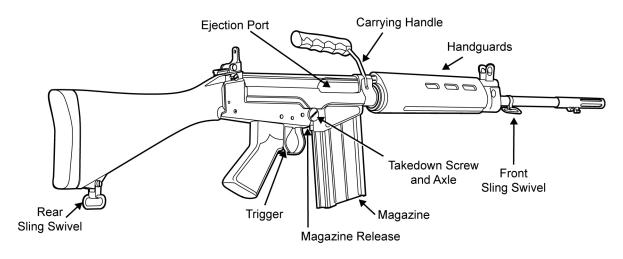


Figure 1. Right Side View of the FN FAL.

Left Side View. Refer to Figure 2.

- 1. **Compensator**. The compensator limits the upward travel of the muzzle when the rifle is fired.
- 2. **Front Sight Assembly.** Provides further, longer distant, sighting of the weapon and is adjustable for elevation.
- 3. **Charging Handle**. The charging handle prepares the weapon for use and chambers a round.
- 4. **Bolt Catch**. When depressed, holds the breech block and bolt assembly to the rear.
- 5. **Pistol Grip**. The pistol grip is used during firing to help stabilize the rifle.
- 6. <u>Selector Lever</u>. The selector lever provides two methods of fire and a safety: SAFE (upper position), SEMI (lower and back position), and AUTO (lower and forward position).
- 7. **Rear Sight Assembly**. Contains markings for 200-600 meter ranges in 100 meter increments.
- 8. <u>Takedown Latch</u>. When pulled to the rear, releases the upper receiver from the lower receiver.

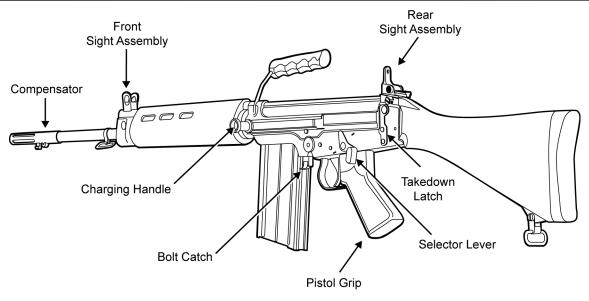


Figure 2. Left Side View of the FN FAL.

FRONT SIGHT ASSEMBLY

The front sight post is moved up or down, using the front sight adjustment tool, when zeroing the rear sight. Once the rear sight is zeroed the front sight post should not be moved. Refer to Figure 3.



Figure 3. Front Sight Post and Front Sight Adjustment Tool.

REAR SIGHT ASSEMBLY

- 1. **Rear Sight Base**. The rear sight base has distance markings for up to 600 meters. Refer to Figure 4.
- 2. **Rear Sight Aperture**. To adjust for distance to target, move the rear sight aperture to the proper distance marking on the sight leaf (e.g., "2" for 200 meters). Refer to Figure 4.

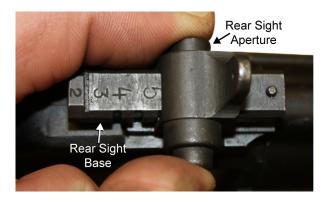


Figure 4. Rear Sight Base and Rear Sight Aperture.

3. <u>Windage Adjustment Screws</u>. There is a windage adjustment screw on both sides of the rear sight. Adjust for windage by unscrewing the screw on the side opposite the side of the desired adjustment, then tightening the other screw until both screws are flush against the rear sight base. Refer to Figure 5.



Figure 5. Windage Adjustment Screw

SELECTOR LEVER

1. **SAFE**. The weapon will not fire. Always place the selector lever on SAFE when loading and unloading the weapon. Refer to Figure 6.



Figure 6. Selector Lever on SAFE.

2. **SEMI**. The weapon will fire one round each time the trigger is pulled. Refer to Figure 7.



Figure 7. Selector Lever on SEMI.

3. <u>AUTO</u>. When the trigger is pulled the weapon will continue to fire until the trigger is released or the magazine is empty. Refer to Figure 8.



Figure 8. Selector Lever on AUTO.

TAKEDOWN LATCH

To open the upper and lower receivers, pull the takedown latch to the rear and swing the receivers apart. Refer to Figure 9.



Figure 9. Pulling the Takedown Latch to the Rear.

END OF WORK PACKAGE

OPERATION UNDER USUAL CONDITIONS

GENERAL

This section contains instructions for the operation of the 7.62 mm, FN FAL rifle under conditions of moderate temperature and humidity.

PREPARATION FOR FIRING

WARNING

Check the bore to ensure it is clean and free of obstruction. Failure to follow this warning may result in injury or death to personnel.

- 1. Ensure the weapon is properly lubricated.
- 2. Check the weapon for correct assembly and proper operation.
- 3. Check the ammunition for grade, identification markings, and serviceability.
- 4. Operate and inspect the controls for satisfactory functionality.

LOADING A MAGAZINE

The magazine is loaded manually.

- 1. If the rounds are in clips, remove them from the clips.
- 2. Insert the cartridges one by one into the magazine, with the base of each cartridge to the rear of the magazine.

NOTE

After filling a magazine, particularly when a magazine filler has not been used, ensure that the cartridges are properly positioned by pressing down with the thumb on the last round inserted.

If the cartridges are not sliding freely inside the magazine (the point of a round may be jamming against the front wall), position the cartridges properly by striking either the rear wall or the bottom of the magazine lightly with the palm of the hand.

WARNING

During loading operations, the rifle should be kept on SAFE.

LOADING THE WEAPON

WARNING

Firing long, sustained bursts may cause "cookoff." This can cause serious injury or death to personnel. Failure to follow this warning may cause injury or death to personnel.

If the weapon is dropped or jarred with a loaded magazine in place, it could chamber a round. Failure to follow this warning may cause injury or death.

To load the weapon:

- 1. Point the weapon in a safe direction. Place selector lever on SAFE.
- 2. Pull the charging handle to the rear and check the chamber to ensure it is clear. Release the charging handle.
- 3. Insert a loaded magazine into the magazine well, pushing upward until it locks into the weapon.

4. With the left hand, pull the charging handle (on the left side of the receiver) to the rear, and then release it. Refer to Figure 1.



Figure 1. Pulling the Charging Handle to the Rear.

- 5. This causes the bolt to strip a cartridge from the magazine, chamber it, and then lock the bolt.
- 6. The weapon is now ready to fire.

ZEROING THE WEAPON

The rifle is zeroed before it is issued to the operator but may require further adjustment to suit individual needs. This correction must be accomplished by a qualified armorer or instructor who has the special tools required. To correct for elevation or direction:

1. Correction for Elevation.

- a. Errors in elevation are corrected by screwing the front sight post up or down. If the foresight is fully up, the mean point of impact (POI) will be moved down and vice versa.
- b. A flat spring secures the front sight in position and forms a clicking device with 16 equal divisions serrated under the front sight post. This assists the armorer when calculating POI movement. Moving the front sight one division (or click) is equal to a variation in POI of 1 cm at 100 m (approx. 0.39 in. at 109 yds).

2. Correction for Direction.

- a. Errors in direction are corrected by moving the rear sight to the right or left.
- b. If the POI is to the right of the point of aim, the screw on the left side of the sight is loosened and the screw on the right is tightened. This moves the sight laterally along its dovetail from right to left. To move the sight to the right, loosen the right-side screw and tighten the left-side screw. When the correction has been made, and before shooting, tighten both screws equally.
- c. A movement of one division (or click) is equal to a variation in POI (to right or left) of 1 cm at 100 m (approx. 0.39 in. at 109 yds).

UNLOADING AND CLEARING THE WEAPON

1. Point the rifle in a safe direction. Put the selector lever on SAFE. Refer to Figure 2.



Figure 2. Selector Lever on SAFE.

- 2. Depress the magazine release and remove the magazine.
- 3. Pull the charging handle fully to the rear to extract and eject the cartridge in the chamber.

- 4. Inspect the chamber and receiver to ensure they are clear of ammunition. The weapon is now clear.
- 5. Release the charging handle and let the bolt go forward.

FIELD FIRING TECHNIQUES

1. Establish zero. Refer to Zeroing the Weapon in this work package.

2. Slide the rear sight aperture until it is aligned with the desired distance marking (2, 3, 4, 5, or 6) on the rear sight base. Refer to Figure 3.

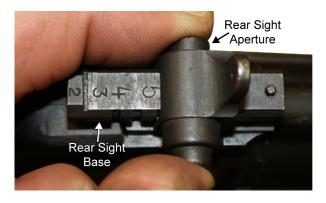


Figure 3. The Rear Sight Aperture Set on "5" for a Distance of 500 Meters.

- 3. Obtain a good sight picture and good sight alignment with the front sight post centered vertically and horizontally in the rear sight aperture.
- 4. Squeeze the trigger and fire.

FAILURE TO FIRE

WARNING

If a noticeable difference in sound or recoil of the weapon is experienced, stop firing. Either condition could indicate an incomplete powder burn or a projectile lodged in the bore.

If the weapon stops firing with a live round in the chamber of a hot barrel, remove the round immediately. If the round cannot be removed within 10 seconds, wait 15 minutes with the weapon pointed in a safe direction. This will avoid possible injury to personnel from cook-off of the chambered round. Keep the face away from the ejection port while clearing a hot chamber. Failure to follow these warnings may result in injury or death to personnel.

If the weapon stops firing, seek cover and perform the following actions:

- 1. <u>Immediate Action</u>. Follow these steps:
 - a. Slap upward on the magazine to ensure it is properly seated.
 - b. Pull and hold the charging handle to the rear.
 - c. Observe the chamber for rounds and debris.
 - d. Release the charging handle to strip a round from the magazine.
 - f. Shoot the weapon.
- 2. **Notify the Unit Armorer**. If immediate action (step 1) has been applied and the weapon fails to fire, notify the unit armorer when the situation permits.

3. Remedial Action.

WARNING

If the weapon stops firing with a live round in the chamber of a hot barrel, remove the round immediately. If the round cannot be removed within 10 seconds, wait 15 minutes with the weapon pointed in a safe direction. This will avoid possible injury to personnel from cook-off of the chambered round. Keep the operator's face away from the ejection port while clearing a hot chamber. Failure to follow these warnings may result in injury or death to personnel.

Use the following steps to clear a cartridge case stuck in the chamber:

- a. Remove the magazine. Refer to *Unloading and Clearing the Weapon* in this work package.
- b. Pull the charging handle to the rear, engage the bolt catch, and lock the bolt to the rear. Slide the charging handle forward until it locks in place
- c. Insert the cleaning flex rod into the barrel from the muzzle end and tap out the cartridge case.

4. Projectile Lodged in the Barrel.

WARNING

Immediately cease fire if an audible popping sound or reduced recoil is experienced during firing. DO NOT apply immediate action. DO NOT attempt to remove a projectile that is lodged in the barrel. Notify the unit armorer. Failure to follow these warnings may result in injury or death to personnel.

Use the following steps if projectile is lodged in the barrel:

- a. Retract the bolt slowly and remove the spent cartridge case.
- b. Clear the weapon and check for unburned powder grains in the receiver or the bore. Check for a projectile lodged in the bore.
- c. Remove unburned powder from the bore before resuming fire.
- d. If a projectile is lodged in the bore, notify the unit armorer.

FIRING SINGLE SHOTS

To fire a single shot:

- 1. Insert a loaded magazine into the weapon.
- 2. Use the tip of a cartridge to push the plunger in the gas plug fully down, and to hold it in this position.
- 3. Turn the cartridge and the gas plug 180 degrees so that the letter "G" appears on top, instead of the letter "A."
- 4. Release the gas plug plunger (the notch in the plug is toward the bottom).
- 5. Charge and load the weapon.
- 6. The weapon is ready for use.
- 7. After firing each single shot, recharge and reload the weapon.

SETTING THE GAS REGULATOR

The gas regulator allows the operator to adjust the amount of propellant gases captured from rounds as they are fired. This ensures the weapon retains the minimum intake necessary for normal functioning without causing undue wear.

Turning the gas regulator to the right (clockwise) increases the quantity of gas retained and used to drive the piston to the rear. Turning the gas regulator to the left (counterclockwise) causes the opposite effect in that it decreases the amount of gas retained. The gas regulator has 13 positions or clicks: 1 is fully closed and 13 is fully opened. Every number is engraved on the gas regulator, starting with 1.

NOTE

Gas regulator adjustments can be made with a cartridge point or by hand if the special spanner wrench is not available.

The weapon has been adjusted at the factory for the correct gas setting. If the gas regulator needs adjustment, its adjustment should be verified by the unit armorer.

NOTE - CONTINUED

The force with which a spent cartridge case is ejected gives an indication of the gas setting. If the gas setting is correct, a cartridge should eject approximately 5-6 feet from the rifle at an approximate 45 degree angle. Violent ejection indicates that too much gas is being retained and that the regulator needs to be turned to the left. Conversely, weak ejection shows that insufficient gas is being retained and the gas regulator should be turned to the right to increase the amount of gas retained.

The correct setting is determined by the point at which the breech block stays open and to the rear after firing a single shot. To set the gas regulator, use the following instructions:

- 1. Insert an empty magazine into the rifle. Gas regulator adjustments are made after firing single shots so that rounds are loaded individually into the ejection port.
- 2. Turn the gas regulator all the way counterclockwise to fully open the gas escape hole. This will cause a short recoil and the breech block to fail to stay open.
- 3. Fire a round and then turn the gas regulator to the right one click.
- 4. Continue with step 3 until the breech block stays open and to the rear after a round is fired.
- 5. Verify the setting by firing three more shots. The breech block should stay open and to the rear after each shot is fired.

- 6. If the breech block fails to remain open and to the rear, turn the gas regulator one click to the right. Repeat steps 3 through 5.
- 7. Continue repeating steps 3 through 5 until five consecutive shots result in the breech block staying open and to the rear after each shot is fired.
- 8. When the breech block stays open and to the rear after each shot is fired, the gas regulator is now at the correct setting.

NOTE

Turn the regulator two more clicks to the right to allow a small reserve of working gas.

AMMUNITION

Only approved 7.62 mm ammunition should be used in the FN FAL rifle.

USING TRACER AMMUNITION

Use tracer ammunition to help hit targets during hours of darkness or low light levels. Tracer ammunition is not as effective as ball ammunition against most targets. When available, mix tracer ammunition with ball ammunition in the magazine.

CHANGING MAGAZINES

In combat, insert a fully loaded magazine before the one being used is completely empty (if possible).

CARE, HANDLING, AND PRESERVATION

1. Packing. Ammunition is packed to withstand conditions ordinarily encountered in the field. Care must be exercised to keep packing from becoming broken or otherwise damaged. All broken packing must be repaired immediately and all markings must be transferred to replacement parts. Ammunition may be packed in metal-lined wooden boxes or metal boxes. Damaged boxes containing metal liners should be air-tested and sealed if equipment to perform this work is available.

WARNING

Store ammunition under protective cover and away from excessive heat and extreme temperatures. Failure to follow this warning may result in injury or death to personnel.

2. **Storing in the Open**. When it is necessary to leave ammunition in the open, raise it at least 6 inches from the ground and cover it with tarpaulins. Whenever possible, use wood between each row to permit full air circulation. Dig suitable trenches to prevent water from running under the stack. Arrange tarpaulins to permit air circulation through the stack, keeping the tarps at least 6 inches from the top, ends, and sides of the stack.

3. **Moisture and High Temperature**.

- a. Keep boxes closed until the ammunition is needed. Ammunition removed from airtight containers, particularly in damp climates, can corrode and become unserviceable.
- b. Protect the ammunition from high temperatures and prolonged exposure to direct sun rays. Such exposure is likely to affect the ballistic performance of the cartridges. The combination of high temperature and humidity can destabilize propellant and the tracer mixture in tracer ammunition.

WARNING

DO NOT attempt to disassemble a cartridge or any of its components. DO NOT polish brass components of cartridges. Failure to follow this warning may result in injury or death to personnel.

CAUTION

The use of oil or grease on cartridges is prohibited.

4. General Care.

a. Protect the ammunition from sand, mud, moisture, frost, snow, ice, grease, and other foreign matter. Immediately wipe off wet or dirty ammunition with a clean, dry cloth. If corrosion forms on cartridges, wipe it off with a clean, dry cloth.

- b. Brass cartridge cases are easily dented. Protect them from damage.
- c. Protect a partially used box of ammunition from unauthorized use by firmly fastening the box cover in place.

PREPARATION FOR FIRING

After removing all packing materials, cartridges for the FN FAL are ready for use. Return unfired cartridges to their original packing or pack them in suitable boxes. Use these cartridges first in subsequent firings in order to reduce stocks of opened containers. Mark packing containers with the cartridge nomenclature, the quality of the cartridges, and the ammunition lot number.

PRECAUTIONS IN FIRING

WARNINGS

Use only authorized ammunition manufactured to U.S. or NATO specifications.

DO NOT fire seriously corroded ammunition, dented cartridges, cartridges with loose projectiles, cartridges exposed to extreme heat (135°F) until they are cooled, or cartridges with loose projectiles are pushed in (short rounds). Failure to follow these warnings may result in injury or death to personnel.

END OF WORK PACKAGE



OPERATION UNDER UNUSUAL CONDITIONS

NOTE

Adjustment of the gas regulator may be needed for the following conditions, to include high altitude.

EXTREME COLD CLIMATE - ARCTIC

Cleaning and lubrication should be done inside a warm room. The weapon should be at room temperature if possible.

- 1. Apply a light coat of Lubricant, Arctic, Weapons (LAW) to all functional parts.
- 2. To prevent condensation and freezing, allow gradual cooling by keeping the weapon covered when moving from a warm area to a cold area.
- Always attempt to keep the weapon dry.
- 4. Unload and hand function the weapon every 30 minutes to prevent freezing of functional parts.
- 5. Do not lay a warm weapon directly in snow or on ice.
- 6. When moving a cold weapon into a warm area, condensation will form in and on the weapon. If possible, leave the weapon in a protected, cold area outside. When the weapon is brought into a warm area, as it reaches room temperature, it should be disassembled and wiped dry several times.
- 7. Ensure the insides of the magazines and ammunition are wiped dry. Moisture can freeze and cause malfunctions. Do not lubricate ammunition.

8. The use of a muzzle cap, a protective magazine bag, and an overall weapon cover will help protect the weapon. Use the items whenever the tactical situation permits.

HOT, WET CLIMATE - JUNGLE

Use Cleaner, Lubricant, and Preservative (CLP) to clean and lubricate the weapon.

- 1. Perform normal maintenance as outlined in *Preventive Maintenance Checks and Services (PMCS)* (WP 0011 00).
- 2. Clean and lubricate the weapon more frequently. Inspect hidden surfaces of the bolt carrier group, upper receiver and chamber/barrel extension, lower receiver assembly, and buttstock assembly for corrosion. Pay close attention to all spring-loaded detents on the weapon.
- 3. To help prevent corrosion, remove hand prints with a dry wiping rag. Lubricate lightly with CLP.
- 4. Unload and check the insides of the magazine frequently for corrosion and moisture. Wipe ammunition dry before reloading.

Use a magazine bag and muzzle cap for protection when the tactical situation permits.

OPERATION UNDER UNUSUAL CONDITIONS - CONTINUED

HOT, DRY CLIMATE - DESERT

Use CLP to clean and lubricate the weapon.

CAUTION

Areas with hot, dry climates usually contain blowing sand and fine dust. Deserts can be hot during daylight hours and freezing during hours of darkness. This will severely tax the weapon as well as other types of equipment. The weapon's continued operation will depend on strictly and routinely following detailed cleaning and lubricating procedures.

1. Dust and sand will get into the weapon and magazine causing malfunctions. Perform a thorough cleaning of the weapon daily and after all firing missions.

NOTE

Always shake CLP prior to use.

- 2. Corrosion is less likely to form on metal parts in a dry climate. Therefore, lubricant should only be applied to internal working surfaces and functioning parts. Use normal amounts of CLP for lubrication. Unload the magazine, dry the inside of the magazine, and wipe down ammunition daily. DO NOT lubricate magazines.
- 3. The use of an overall weapon protection cover, muzzle cap, and spare magazine protective bags will help protect the weapon and ammunition from sand and dust. Use these items when the tactical situation permits.

OPERATION UNDER UNUSUAL CONDITIONS - CONTINUED

4. At all times, as a minimum effort to help keep out sand and dust, keep the port covers closed and a muzzle cap on the muzzle.

NOTE

Removal of muzzle cap is recommended prior to firing. Retain muzzle cap for future use. Firing the weapon with muzzle cap installed poses no danger to the weapon or operator.

HEAVY RAIN AND FORDING OPERATIONS - ALL CLIMATES

- 1. Perform maintenance in accordance with climate conditions.
- 2. Always attempt to keep weapon dry.
- 3. Use a weapon cover, muzzle cap, and protective bags to protect the weapon and magazine.

WARNING

DO NOT fire the weapon if water is present in the barrel. Failure to follow this warning may result in injury or death to personnel.

4. Always drain any water from the barrel prior to firing. Dry the bore with a clean swab.

NUCLEAR, BIOLOGICAL, AND CHEMICAL (NBC)

General procedures can be found in *Marine Corps Warfighting Publication: MCWP* 3-37.2A_ and *MCWP* 3-37.3_.

END OF WORK PACKAGE

CHAPTER 3

TROUBLESHOOTING



TROUBLESHOOTING INTRODUCTION

TROUBLESHOOTING

This chapter contains troubleshooting information for locating and correcting malfunctions that may develop with the FN FAL rifle. The *Troubleshooting Symptom Index* (WP 0008 00) serves as a quick reference to aid in troubleshooting the weapon. Table 1, in WP 0009 00, is a guide for troubleshooting. Perform the tests, inspections, and corrective actions in the order shown in the table. The table does not cover all possible malfunctions; it includes only the more common malfunctions. If the weapon malfunction is not listed or actions listed do not correct the fault, notify the unit armorer.

END OF WORK PACKAGE



TROUBLESHOOTING SYMPTOM INDEX

Ma	<u>lfunction/Symptom</u>	Troubleshooting Procedure Page
1.	Double Feed	
2.	Failure to Chamber	
3.	Failure to Cock or Runaway Weapon	
1.	Failure to Eject	
5.	Failure to Feed	
5.	Failure to Extract	
7.	Failure to Fire.	
3.	Failure to Lock to the Rear After the Last Round	
9.	Sluggish Operation	
10.	Stops Firing	

END OF WORK PACKAGE



TROUBLESHOOTING PROCEDURES

Table 1. Troubleshooting Procedures.

	Malfunction		Probable Cause	Corrective Action
1.	Double Feed.	Dirty ammunition or chamber.		Clean ammunition and/or chamber.
		2.	Broken extractor/spring.	Notify unit armorer.
2.		1.	Dirty ammunition.	Clean ammunition.
	Chamber.		Carbon buildup in gas system or receiver.	Clean gas regulator, piston and cylinder. If problem still exists, notify unit armorer.
		3. Damaged round.4. Damaged or weakened helical compression spring (driving).		Remove round and recharge weapon.
				Notify unit armorer.
			Dirty chamber.	Clean chamber.
			Damaged gas regulator.	Notify unit armorer.

Table 1. Troubleshooting Procedures - Continued.

	Malfunction		Probable Cause	Corrective Action	
3.	Failure to Cock or Runaway	1.	Broken, worn, or burred sear.	Notify unit armorer.	
	Weapon.	2.	Piston assembly sear notch worn.	Notify unit armorer.	
		3.	Sear stuck in trigger housing.	Notify unit armorer.	
		4.	Short recoil.	Clean and lubricate bolt and breech block assembly. Adjust the gas regulator setting. If problem still exists, notify unit armorer.	
		5.	Carbon buildup in gas system.	Clean gas regulator, piston, and cylinder.	
4.	Failure to Eject.	1.	Short recoil.	Clean and lubricate bolt and breech block assembly Adjust the gas regulator setting. If problem still exists, notify unit armorer.	
		2.	Damaged ejector.	Notify unit armorer.	
		3.	Carbon buildup in gas system.	Clean gas regulator, piston, and cylinder.	

Table 1. Troubleshooting Procedures - Continued.

	Malfunction		Probable Cause	Corrective Action
5.	Failure to Feed.	1.	Insufficient lubrication.	Lubricate as required.
		2.	Defective ammunition.	Remove defective ammunition and install new ammunition.
		3.	Obstruction in receiver.	Remove obstruction.
		4.	Insufficient gas pressure.	Clean gas regulator, piston, and cylinder.
		5.	Damaged, weak, or worn operating parts.	Notify unit armorer.
6.	Failure to Extract.	1.	Inspect for stuck cartridge case.	Follow instructions in WP 0005 00.
	EXITACI.	2.	Dirty chamber, bolt assembly and breech block.	Clean chamber and/or clean bolt assembly and breech block. If problem still exists, notify unit armorer.
		3.	Carbon buildup in gas system.	Clean gas regulator, cylinder, and piston.

Table 1. Troubleshooting Procedures - Continued.

	Malfunction		Probable Cause	Corrective Action
6.	Failure to Extract - Cont.	4.	Damaged extractor/spring.	Notify unit armorer.
7.	Failure to Fire.	1.	Safety on.	Push safety down to R (SEMI).
		2.	Faulty ammunition.	Eject round. Replace ammunition.
		3.	Broken or damaged firing pin.	Notify unit armorer.
		4.	Broken or weakened helical compression spring (driving).	Notify unit armorer.
8.	Failure to Lock to the Rear After the Last Round.	1.	Damaged or defective magazine.	Notify unit armorer.
		2.	Dirty bolt catch.	Clean the bolt catch.
		3.	Worn or broken bolt catch, bolt catch spring, or bolt catch detent.	Notify unit armorer.

Table 1. Troubleshooting Procedures - Continued.

	Malfunction		Probable Cause	Corrective Action
8.	Failure to Lock to the Rear After the Last Round - Cont.	4.	Short recoil.	Clean and lubricate bolt and breech block assembly. Adjust the gas regulator setting. If problem still exists, notify unit armorer.
9.	00	1.	Dirty receiver.	Clean and lubricate.
	Operation.		Lack of lubricant.	Lubricate.
		3.	Carbon buildup in gas system.	Clean gas regulator, piston, and cylinder.
10	. Stops Firing.	1.	Defective round in chamber.	Eject round.
		2.	Bolt and breech block assembly not forward and locked.	Remove obstruction, or clean and lubricate as required.
		3.	Primer dented but not fired.	Eject round. If this occurs more than once, it may be faulty ammunition or a worn firing pin. Notify unit armorer.

Table 1. Troubleshooting Procedures - Continued.

Malfunction	Probable Cause	Corrective Action
10. Stops Firing - Cont.	Sticking feed mechanism.	Clean and lubricate feed mechanism. If problem still exists, notify unit armorer.
	5. Carbon buildup in gas system.	Clean gas regulator, piston, and cylinder. If problem still exists, notify unit armorer.
	6. Short recoil.	Clean and lubricate bolt and breech block assembly. Adjust the gas regulator setting. If problem still exists, notify unit armorer.
	7. Bolt jammed in barrel socket.	Notify unit armorer.

END OF WORK PACKAGE

CHAPTER 4

MAINTENANCE INSTRUCTIONS



SERVICE UPON RECEIPT

INSPECTING THE WEAPON

WARNING

Confirm the weapon is unloaded and on SAFE before performing the following procedures. Failure to follow this warning may result in injury or death to personnel.

Inspect all assemblies for missing, broken, or loose parts. Refer to Table 1 in this work package. Inspect for cracks, dents, burrs, excessive wear, rust, or corrosion. Ensure all items are cleaned and lubricated. If defects in this work package are noted, bring them to the attention of the unit armorer. The unit armorer will determine if a defect exists.

SERVICE UPON RECEIPT - CONTINUED

Table 1. Points of Inspection.

Item Inspected	Procedure/Condition
Sling	Check for tears, cuts, and cracks. All hooks must be present and the webbing surrounding the hooks must be free of mold. Clean with soap and water. Let air dry.
Lower Receiver and Buttstock Assembly	Check the entire assembly for damage, corrosion, and overall finish. The buttstock and pistol grip should be secure and free of cracks and damage. The magazine release, bolt catch, and selector lever should move freely without binding. The selector lever must provide a positive "click" when in each firing-mode position.
Upper Receiver and Barrel Assembly	Check the entire assembly for damage, corrosion, and overall finish. The handguards should be secure and free of cracks and damage. Check the compensator, gas block, and carrying handle for damage and looseness. The charging handle should move smoothly without binding and lock in the forward position.
Front Sight Post	Check that the front sight post is not bent or damaged. Adjust up and down with the front sight assembly tool to ensure rotation.

SERVICE UPON RECEIPT - CONTINUED

Table 1. Points of Inspection – Continued.

Item Inspected	Procedure/Condition
Rear Sight Assembly	Check the assembly for damage and verify it is tight and secure. The windage adjustment screws move smoothly and secure the rear sight base. The aperture slides on the base. The slide catch secures the aperture on the distance markings on the base.
Magazine Assembly	Check for dents, spring tension, and serviceability of the follower. Check for correct position of cartridges in the magazine. Check that the magazine fits and releases properly.
Breech Block and Bolt Assembly	Cycle the breech block back and forth, feeling for any roughness, which may indicate wear, corrosion, or dirt in the receiver. Check the firing pin for chipping or damage. Check the extractor for chips or wear. Check the extractor for spring tension.
Trigger Mechanism	The trigger moves smoothly without binding in all fire modes except SAFE.

END OF WORK PACKAGE



The shooter will perform Preventive Maintenance Checks and Services (PMCS) before and after firing a 7.62 mm, FN FAL rifle.

1. <u>General</u>. To ensure the readiness of the weapon, perform preventive maintenance procedures prior to each mission in accordance with Table 1 in this work package. Preventive maintenance procedures include inspection, cleaning, and performance of the checkout procedures.

2. Explanation of PMCS Table Columns and Entries.

- a. <u>Item Number</u>. Numbers in this column act as references. When completing an Equipment Inspection and Maintenance Worksheet, include the item number for the check/service item. Item numbers appear in the order in which the checks and services are to be performed.
- b. <u>Interval</u>. This column states the designated interval when each check is to be performed.
 - BEFORE procedures must be performed prior operating the equipment for its intended mission.
 - DURING procedures must be performed while operating the equipment for its intended mission.
 - AFTER procedures must be performed immediately following the operation of the equipment.
- Item to Check/Service. This column lists the items and locations to be checked or serviced.
- d. **Procedure**. This column contains a brief description of PMCS procedures to be performed. The procedure must follow the time stated in the interval column.

- e. <u>Not Fully Mission Capable If</u>. This column states which faults will prevent the weapon from being capable of performing its primary mission. The weapon should not be used if it meets any of the faults listed in this column. Follow standard operating procedures for correcting or reporting weapon failure.
- 3. Other Table Entries. Observe all WARNINGS, CAUTIONS, and NOTES.

WARNING

Confirm the weapon is unloaded, clear, and on SAFE before performing the following procedures. Do not keep live ammunition near the work area. Failure to follow these warnings may cause injury or death to personnel.

Table 1. Preventive Maintenance Checks and Services.

(1) Item No.	(2) Interval	(3) Item to Check/Service	(4) Procedure	(5) Not Fully Mission Capable if:
			WARNING Do not interchange bolt assemblies from one weapon to another. Failure to adhere to this warning may result in injury or death to personnel or damage to the weapon.	
1	Before	Weapon	Visually inspect the weapon for missing or damaged parts. Report missing or damaged parts to armorer.	Parts are missing or damaged to the point of being unserviceable.
2	During	Weapon	Periodically inspect weapon to ensure it is clean and no debris is in bore. If debris is in bore, clean bore.	Foreign material cannot be removed from bore.

Table 1. Preventive Maintenance Checks and Services – Continued.

(1)	(2)	(3)	(4)	(5)
Item No.	Interval	Item to Check/Service	Procedure	Not Fully Mission Capable if:
3	Before and After	Magazine	Ensure that magazine slips easily into the magazine well and locks into place.	Magazine is distorted or hard to seat in magazine well.
			b. Ensure that magazine follower has spring tension and moves easily inside of magazine.	Magazine follower is stuck or has weak spring tension.
4	Before and After	Upper Receiver - Barrel	Check for barrel looseness (using hand pressure only).	Barrel is loose enough to be moved by hand.

Table 1. Preventive Maintenance Checks and Services – Continued.

(1) Item No.	(2) Interval	(3) Item to Check/Service	(4) Procedure	(5) Not Fully Mission Capable if:
5	Before and After	Upper Receiver - Carrying Handle Assembly	Check for missing or damaged parts. Ensure carrying handle assembly will mount to the upper receiver.	Handle assembly is missing, has damaged parts, or will not mount to upper receiver.
6	Before and After	Upper Receiver - Handguards	Check for looseness or cracks.	Handguards are loose or cracked.
7	Before and After	Upper Receiver- Compensator	Check for looseness.	Compensator is loose.
8	During	Upper Receiver- Gas Regulator	Check that the gas regulator can be adjusted and secures in place.	Gas regulator cannot be adjusted or is loose.

Table 1. Preventive Maintenance Checks and Services – Continued.

(1) Item No.	(2) Interval	(3) Item to Check/Service	(4) Procedure	(5) Not Fully Mission Capable if:
9	Before and After	Lower Receiver - Magazine Release	Check magazine release for spring tension and retention of magazine.	Magazine release has no spring tension or does not retain or release magazine.
10	Before and After	Lower Receiver - Buttstock	Check for crack, looseness, and missing parts.	Buttstock is loose or is missing parts.
11	Before and After	Weapon Sight	Move front and rear sights to ensure they can be adjusted. Return sights to zero setting on weapon.	The sights are damaged, missing, or cannot be adjusted.

Table 1. Preventive Maintenance Checks and Services – Continued.

(1) Item No.	(2) Interval	(3) Item to Check/Service	(4) Procedure	(5) Not Fully Mission Capable if:
12	Before and After	Weapon	Clean and lubricate weapon after firing approximately 200 rounds of ammunition or at the end of the day. Refer to WP 0013 00.	
13	After	Weapon and Equipment	 a. Disassemble the weapon. Refer to WP 0014 00. b. Clean and lubricate weapon. Refer to WP 0013 00. c. Disassemble, inspect, and clean magazine. Refer to WP 0014 00. d. Report all missing or damaged parts to unit armorer. 	Parts are missing or damaged.

Table 1. Preventive Maintenance Checks and Services – Continued.

(1) Item No.	(2) Interval	(3) Item to Check/Service		(4) Procedure	(5) Not Fully Mission Capable if:
14	Before and After	Selector Lever: SAFE (Function Check)	a. b.	Clear the weapon. Refer to WP 0005 00. Place selector lever on SAFE.	
			C.	Pull the trigger. Hammer should not fall.	Hammer falls.
15	Before and After	Selector Lever: SEMI (Function Check)	a.	Place selector lever on SEMI.	
			b.	Pull the trigger to rear and hold. Hammer should not fall.	
			C.	Hammer should fall.	
			d.	Charge the weapon.	

Table 1. Preventive Maintenance Checks and Services – Continued.

(1) Item No.	(2) Interval	(3) Item to Check/Service		(4) Procedure	(5) Not Fully Mission Capable if:
15 Cont.	Before and After	Selector Lever: SEMI (Function Check)	e.	Release trigger and pull trigger again. Hammer should fall.	Hammer does not fall.
16	Before and After	Selector Lever: AUTO (Function Check)	a.	Charge the weapon.	
			b.	Pull the trigger to rear and hold. Hammer should fall.	
			C.	Charge the weapon.	
			d.	Release trigger and pull trigger. Hammer should not fall.	Hammer falls.
			e.	Hammer should have fallen when charging handle was released and bolt moved forward.	

LUBRICATION

1. <u>Inspect Before Lubrication</u>. If items are found to be unsatisfactory during inspection, notify the unit armorer.

WARNING

Do not interchange bolt assemblies between weapons. Failure to follow this warning may cause injury or death to personnel.

- a. **Breech Block and Bolt Assembly**. Inspect for cracks or fractures, especially in the bottom rear where it locks into the upper receiver area. Bolts containing pits extending into the firing pin hole need to be replaced.
- b. Firing Pin. Inspect the firing pin for a bent, cracked, blunted, or sharp end.
- c. **Extractor and Extractor Spring**. Inspect the extractor for chipped or broken edges in the area of the lip that engages the cartridge rim. Check the extractor spring tension.

2. Cleaner, Lubricant, and Preservative (CLP).

- a. CLP performs the following:
 - (1) Dissolves firing residue and carbon.
 - (2) Provides a layer of teflon for lubrication of parts.
 - (3) Prevents rust from forming.

CAUTION

Do not dry clean the weapon. Do not use hot water or other solvents to clean the weapon. This will remove the teflon lubricant built up as a result of using CLP.

- b. Use CLP as follows:
 - (1) Shake the bottle well before each use.
 - (2) Place a few drops on a patch or rag.
 - (3) Clean the weapon with patches or rags until no residue is found.
 - (4) Use another patch or rag to apply a fresh, light coat.
- 3. <u>Lubrication</u>. CLP is the lubricant to be used under all but the coldest arctic conditions when Lubricant, Arctic, Weapons (LAW) is used. Remove excessive lubricant from the bore and chamber before firing. For a lubricant guide, refer to Figure 1.

NOTE

Dry cleaning solvents may be used to remove lubricants completely. When moving to extreme cold weather operations, remove traces of CLP before applying LAW.

Under all but the coldest arctic conditions, CLP is the lubricant to use on the weapon. Remember to remove excessive CLP from the bore and chamber before firing. CLP - Cleaner, lubricant, and preservative Refillable 1/2 oz. bottle NSN 9150-01-102-1473 BETWEEN +10° AND -10° EITHER CLP OR LAW LAW - Lubricating oil, arctic, weapons 1 qt. can NSN 9150-00-292-9689

Lightly Lubed - A film of CLP barely visible to the eye.

Generously Lubed - Heavy enough so that it can be spread with the finger.

Figure 1. Lubricant Guide.

a. Upper Receiver and Barrel Assembly.

- (1) Lightly lubricate the inside of the receiver, bore and chamber, outer surfaces of the barrel, front sight, magazine release, and barrel surfaces under the handguards.
- (2) Apply one drop of CLP to the front sight post, rotate to work in the CLP, wipe away excess CLP, and return to original position.

b. **Breech Block and Bolt Assembly**.

(1) Dry the breech block and lightly lubricate with CLP. Generously lubricate the cam recess and receiver rail recesses of the breech block.

CAUTION

Apply only a light coat of CLP to the firing pin and firing pin hole in the bolt.

- (2) LIGHTLY lubricate the firing pin and the firing pin hole in the bolt
- (3) Generously lubricate the extractor, extractor retaining pin, firing pin retaining pin, and outside of the bolt. Manipulate the extractor to work in the CLP.

c. Lower Receiver and Buttstock Assembly.

- (1) Lightly lubricate all moving parts and pins inside the lower receiver.
- (2) Do not lubricate the pistol grip or buttstock.

d. Rear Sight Assembly.

- (1) Unscrew and lightly lubricate the windage adjustment screws.
- (2) Lightly lubricate the rear sight base. Slide the rear sight aperture forward and backward to work in the lubricant.
- (3) Return the rear sight to its original setting.

NOTE

After amphibious salt water operations, thoroughly rinse the rear sight in fresh water until the tactical situation allows for thorough cleaning and lubrication.

END OF WORK PACKAGE

GENERAL MAINTENANCE INSTRUCTIONS

THIS WORK PACKAGE COVERS

Scope, Work Safety, General Information, Cleaning Instructions, Inspection Instructions, and Lubrication Instructions.

INITIAL SETUP

Maintenance Level

Operator

References

WP 0011 00 WP 0013 00

WP 0018 00

GENERAL MAINTENANCE INSTRUCTIONS - CONTINUED

SCOPE

The following general maintenance instructions contain general shop practices and specific methods to properly maintain the FN FAL rifle.

WORK SAFETY

- 1. Before starting a task, think about the risks and safety hazards. Wear protective gear such as safety goggles or lenses, safety shoes, a rubber apron, and gloves.
- 2. Observe all WARNINGS, CAUTIONS, and NOTEs.

GENERAL INFORMATION

CAUTION

Do not mix lubricants on the same weapon. The weapon must be cleaned thoroughly during any change from one lubricant to another. Dry cleaning solvent (SD) is recommended for cleaning before changing lubricants.

When the term cleaner, lubricant, and preservative (CLP) or the word lubricant is cited in this TM, it is to be interpreted to mean that CLP; lubricating oil, semi-fluid, automatic weapons (LSA); or lubricating oil, arctic, weapons (LAW) can be used.

1. Disassemble, thoroughly clean, inspect, and lubricate the weapon.

- 2. Always shake CLP prior to use.
- 3. After firing, clean the weapon with CLP according to instructions in WP 0014 00. Wipe the weapon dry and lubricate according to instructions in WP 0012 00.

NOTE

Contact the unit armorer if parts from the cleaning kit are missing or defective.

4. Cleaning materials (e.g., patches, pipe cleaners, and CLP) are expendable items. For a complete list of cleaning materials refer to WP 0019 00.

CLEANING INSTRUCTIONS

NOTES

Use only CLP for cleaning and lubrication in all but the most severe conditions.

Cloths or rags saturated with CLP must be disposed of in accordance with authorized facilities' procedures.

Cleaning instructions are the same for the majority of the parts and components of the weapon.

The importance of cleaning must be thoroughly understood by operators and maintenance personnel. Great care and effort are required in cleaning. Dirt and foreign material are a constant threat to satisfactory maintenance. The following apply to all cleaning, inspection, repair, and assembly operations:

- a. Clean all parts before inspection, after repair, and before assembly.
- b. To prevent contamination, hands should be kept free of any accumulation of grease which can collect dust, dirt, or grit.
- c. After cleaning, all parts should be covered or wrapped to protect them from dust and dirt. Parts that are subject to rust should be lightly oiled.

1. Cleaning Disassembled Parts.

- a. Dry and cover all cleaned parts.
- b. All parts subject to rusting must be lightly oiled and wrapped.
- c. Keep all related parts and components together. Do not mix parts.

2. Castings.

- a. Clean the inner and outer surfaces of castings with CLP.
- b. Use a stiff brush to remove sludge and gum deposits.

3. Machined Surfaces.

- a. Clean machined surfaces with CLP.
- b. Dry surfaces thoroughly.
- 4. Mated Surfaces. Lightly coat with CLP and wrap all parts subject to rust before storing.

INSPECTION INSTRUCTIONS

1. <u>General</u>. All components and parts must be checked carefully to determine if they are serviceable for reuse or if they must be scrapped.

2. <u>Castings</u>.

- a. Replace all cracked castings.
- b. Inspect machined surfaces for nicks, burrs, or raised metal. Mark damaged areas for repair or replacement.
- c. Inspect all screws and screw openings for damaged or stripped threads.
- 3. Machine-Tooled Parts. Inspect for cracks, breaks, elongated holes, wear, and chips.
- 4. Machined Surfaces. Inspect for cracks, evidence of wear, galled or pitted surfaces, burrs, nicks, and scratches.
- 5. Mating Surfaces. Inspect mating surfaces for seal, secure fit, and pitting.

- 6. **Rusted Surfaces**. Inspect for pitting, holes, and severe damage.
- 7. Internal Parts. Inspect for cracks, nicks, burrs, evidence of overheating, and wear.
- 8. Externally Exposed Parts. Inspect for breaks, cracks, rust damage, and wear.
- 9. **Springs**. Inspect for broken, collapsed, and twisted coils.

LUBRICATION INSTRUCTIONS

Refer to *Preventative Maintenance Checks and Services (PMCS)* (WP 0011 00) for detailed, illustrated instructions on proper lubrication. The following are some general practices to remember:

- 1 Use the correct lubricant
- 2. Keep lubricants clean.
- 3. Lubricate clean, disassembled, and new parts to prevent rust.

END OF WORK PACKAGE

WEAPON CLEANING

THIS WORK PACKAGE COVERS

Cleaner, Lubricant, and Preservative (CLP)

Cleaning the Weapon.

INITIAL SETUP

Maintenance Level

Operator

Materials/Parts

Cleaner, tobacco pipe Pipe cleaner Rag, wiping References

WP 0005 00 WP 0014 00 WP 0018 00

Equipment Conditions

Weapon field stripped (WP 0014 00)

WARNING

Confirm the weapon is clear and on SAFE before performing the following procedures. Failure to follow this warning may result in injury or death to personnel.

CLEANING THE WEAPON

Cleaning is part of scheduled maintenance and should always begin with an inspection of the weapon. Use the equipment listed in WP 0018 00 for cleaning and lubrication. The weapon should be cleaned within two hours of firing or as soon as the tactical situation permits.

1. Field Expedient Cleaning.

NOTE

After cleaning and before reassembly, lightly lubricate all parts with CLP.

- a. Clear the weapon. Refer to WP 0005 00.
- b. Check the bore and chamber for fouling.
- c. Remove the bolt assembly and breech block. Refer to WP 0014 00.
- d. Clean carbon and oil from the firing pin and all surfaces of the bolt assembly and breech block with a clean, dry patch.

- e. Clean the firing pin hole with a pipe cleaner.
- f. Apply a light coating of CLP. Paying special attention to the breech block recesses.

CAUTION

Ensure the patch goes completely through the compensator. Do not reverse the direction while the patch is in the bore or compensator.

- g. Swab out the barrel from chamber to muzzle.
 - (1) Insert a clean patch in a cleaning rod. Apply several drops of CLP to the patch.
 - (2) Holding the upper receiver in one hand, insert the end of the rod without the patch holder into the chamber. Allow the rod to fall straight through the bore. Two to three inches will stick out of the muzzle.
 - (3) Pull the cleaning rod out the muzzle. The rod will twist as it is pulled through.

2. <u>Detailed Cleaning Techniques - with an Otis Kit</u>

- a. Attach the bore obstruction remover tip to one end of the flexible cleaning flex rod and attach the slotted tip to the other end of the rod.
- b. Place the slotted tip into an outside hole on a cleaning patch.

NOTE

The size of the patch may be varied by pinching the patch in locations further away from the slot.

- c. Pinch a portion of the patch and insert it through the slot in the slotted tip. Pull it tight to tie the knot and ensure the patch scrubs efficiently.
- d. Turn the outer edge of the patch down over itself.

NOTE

If done correctly, the patch forms a symmetrical cone that will center the patch in the bore and ensure 360° cleaning.

Always use a clean patch each time it is passed through the bore.

- e. Apply three to five drops of CLP to the front end of the knot in the patch. Do not dip the patch into the CLP.
- f. Insert the bore obstruction remover tip and flexible cleaning flex rod into the chamber until the patch enters the receiver.
- g. Use the patch to mop out the receiver and slides.
- h. Hold the flexible cleaning flex rod by the knurled bore obstruction remover and rotate the rod as the patch enters the locking lugs. Use fingers or the cleaning brush to force the patch into the recess in front of the locking lugs.

NOTE

Give special attention to the following chamber and neck areas (in step i), particularly if the weapon has been firing blank rounds.

- i. Continue to turn the patch as it passes through the chamber and enters the neck area.
- j. Continue to pull the flexible cleaning flex rod and patch through the barrel until the patch exits the compensator.
- k. Remove the patch and slotted tip from the flexible cleaning rod.
- 1. Attach the chamber brush to one end of the short chamber cleaning flex rod and the T-handle to the other end.
- m. Cover the chamber brush with a used patch. Mop out the locking lugs and chamber while turning it in a clockwise direction with the T-handle. Let the brush feed itself into the chamber.
- n. Give the brush and swab several turns while in the chamber, ensuring the shoulder of the chamber is cleaned.
- o. Turn and pull the brush and patch from the chamber.
- p. Attach the bore brush to the flexible cleaning rod.

NOTE

Do not push the bore brush into the bore at first.

q. Insert the flexible cleaning flex rod into and down through the bore.

- r. Turn the flexible rod as the bore brush enters the chamber and into the neck so that the brush scrubbing the shoulder of the neck can be felt.
- s. Pull the bore brush into and through the bore in a breech-to-muzzle direction.
- t. Using a clean, dry patch for each pass through the chamber and bore, repeat steps 6 through 11.
- u. If the patch does not come out clean, repeat steps 16 through 20 until the patch comes out clean.

3. Thorough Cleaning.

- a. **Upper Receiver and Barrel Assembly**. Clean with CLP.
 - (1) Clean all areas of powder fouling, corrosion, dirt, and rust.
 - (2) Clean the chamber and gas tube.

CAUTION

When using the bore brush, do not reverse direction while the brush is in the bore.

(3) Clean the bore, starting at the receiver, dropping the cleaning rod, with bore brush attached, through the chamber and pull them through the barrel and muzzle.

CAUTION

Do not remove the inner heat shield.

- (4) Wipe the handguards with a cloth. An armorer must remove them for a thorough cleaning.
- (5) Clean the front and rear sights with a brush and CLP.
- (6) Clean the compensator with a brush and CLP.
- b. Lower Receiver and Buttstock Assembly. Clean with CLP.
 - (1) Clean all areas of powder fouling, corrosion, dirt, debris, and rust.
 - (2) Clear any dirt and debris from on or around the trigger mechanism.
 - (3) Do not use CLP on the pistol grip and buttstock. Clean with a brush and cloth.
- c. **Bolt Assembly and Breech Block**. Clean with CLP.

NOTE

Use a well-worn bore brush only.

- (1) Scrub the outer and inner surfaces of the breech block with CLP.
- (2) Clean the firing pin hole (using a pipe cleaner) and firing pin with CLP. Wipe off excess CLP.
- (3) Check the extractor for spring tension and clean any carbon and debris from under the extractor lip.
- (4) Apply CLP to the extractor and depress it several times to work in the CLP. Wipe off excess CLP.

d. Magazine.

- (1) Disassemble the magazine. Refer to WP 0014 00.
- (2) Clean the magazine with CLP. Wipe dirt from the body, magazine spring, follower, and base.
- (3) Lightly lubricate the spring.
- (4) Reassemble the magazine. Refer to WP 0014 00.

END OF WORK PACKAGE

WEAPON MAINTENANCE (FIELD STRIPPING)

THIS WORK PACKAGE COVERS

Disassembly/Field Stripping and Reassembly, Magazine Disassembly and Reassembly.

INITIAL SETUP

References

Equipment Conditions

WP 0005 00

Weapon cleared (WP 0005 00)

DISASSEMBLY/FIELD STRIPPING

WARNING

Ensure the weapon is clear and on SAFE before performing these procedures. Failure to follow this warning may cause injury or death.

- 1. Clear the weapon. Refer to WP 0005 00.
- 2. Remove the sling and magazine.

3. Separate the Upper and Lower Receivers.

- a. Pull the takedown latch to rear.
- b. At the same time, press the lower receiver and buttstock assembly downwards, which will swing the rifle open. Refer to Figure 1.



Figure 1. Separating the Receivers.

c. From the right side of the weapon, unscrew the takedown screw with a field expedient tool and then remove the takedown screw and takedown axle. Refer to Figure 2.



Figure 2. Removing the Takedown Screw.

d. Remove the upper receiver and barrel assembly from the lower receiver and buttstock assembly.

4. Remove the breech block and bolt assembly by grasping the strut and pulling it out of upper receiver. Refer to Figure 3.

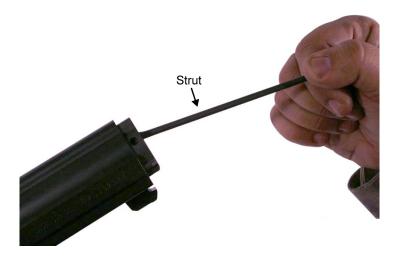


Figure 3. Removing the Breech Block and Bolt Assembly.

5. Remove the top cover from the upper receiver by sliding it to the rear.

6. Place the index finger on the bolt face, and tilt the bolt assembly out of the breech block while depressing the firing pin with thumb. Refer to Figure 4.



Figure 4. Removing the Bolt Assembly from the Breech Block.

WARNING

The firing pin is under spring tension.

5. While pressing on the rear of the firing pin, push out the firing pin retaining pin from the side of the bolt with a tip of a round or a field expedient tool. When the firing pin retaining pin has been removed, the firing pin will be pushed out by the spring that is housed inside of the bolt. Refer to Figure 5.



Figure 5. Removing the Firing Pin Retaining Pin from the Bolt.

WARNING

The gas plug is under spring tension.

6. While compressing the gas piston and gas piston spring, remove the gas plug. Remove the gas plug by depressing the lock lever on the gas plug and rotating it counterclockwise 270 degrees. Refer to Figure 6.



Figure 6. Removing the Gas Plug.

7. Remove the gas piston and gas piston spring from the gas tube. Refer to Figure 7.



Figure 7. Removing the Gas Piston and Gas piston spring.

8. Separate the gas piston spring from the gas piston.

REASSEMBLY

- 1. Slide the gas piston spring onto the gas piston.
- 2. Insert the gas piston and gas piston spring into the gas tube. Refer to Figure 8.



Figure 8. Inserting the Gas Piston and Gas Piston Spring into the Gas Tube.

3. Install the gas plug and rotate it 270 degrees clockwise. Refer to Figure 9.



Figure 9. Installing the Gas Plug.

4. <u>Install the Firing Pin</u>

- a. Insert the firing pin with its spring into the bolt with the notch up.
- b. Press in on the rear of the firing pin and install the firing pin retaining pin.
- c. Ensure the retaining pin is flush with the side of the bolt.

5. Install the Breech Block and Bolt Assembly.

- a. Align the back of the firing pin protruding from the rear of the bolt with the hole in the back of the breech block. Ensure the bolt is oriented correctly.
- b. While pushing the rear of the firing pin, push the bolt assembly back and up into the breech block. Refer to Figure 10.



Figure 10. Inserting the Bolt Assembly into the Breech Block.

- c. Install the top cover onto the upper receiver by sliding it to the front, ensuring the bottom edges are in the rails of the upper receiver.
- d. Ensure the bolt is fully forward in the breech block.
- e. Install the breech block and bolt assembly by guiding them onto the rails in the upper receiver and sliding it fully forward. Refer to Figure 11.

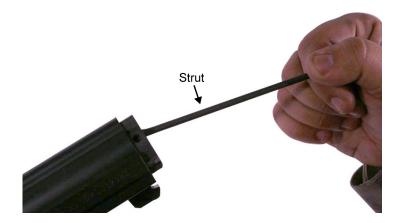


Figure 11. Installing the Breech Block and Bolt Assembly.

6. Insert the takedown axle through both receivers from the left side of the weapon. Screw the takedown screw into the right side of the takedown axle and tighten it with a field expedient tool. Refer to Figure 12.



Figure 12. Installing the Takedown Screw.

- 7. Push the rear of the upper receiver down onto the lower receiver until they lock together.
- 8. Install the sling onto the weapon.

DISASSEMBLY OF MAGAZINE

1. Slide the base plate off the bottom of the magazine body with a hand over the bottom to catch the magazine spring. Refer to Figure 13.

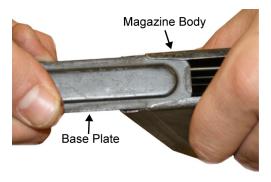


Figure 13. Removing the Base Plate

2. Remove the magazine spring and follower from the magazine body. Refer to Figure 14.

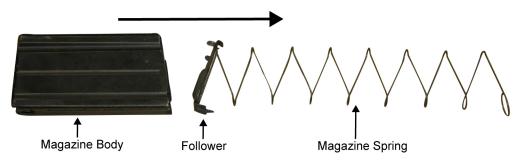


Figure 14. Removing the Magazine Spring and Follower.

REASSEMBLY OF MAGAZINE

1. Insert the magazine spring and follower into the magazine body. Refer to Figure 15.

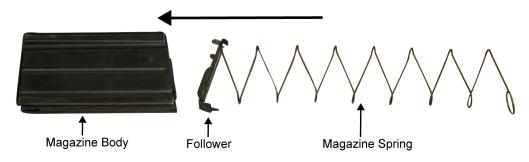


Figure 15. Inserting the Magazine Spring and Follower.

NOTE

Printing on base must be on the outside.

2. Slide the base plate onto the bottom of the magazine body. Refer to Figure 16.

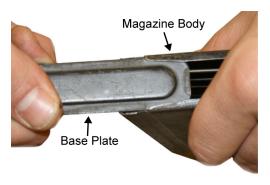


Figure 16. Installing the Base Plate.

END OF WORK PACKAGE



PREPARATION FOR STORAGE

STORAGE PROCEDURES

WARNING

DO NOT store the weapon with live ammunition in either the chamber or magazine. Always assume that every weapon is loaded until it is determined through visual and physical inspection that it is not loaded. Refer to WP 0005 00 for clearing or unloading procedures. Failure to follow these warnings may cause injury or death to personnel.

Stored for Extended Periods. When the weapon is to be stored for an extended period (greater than 90 days), follow
the procedures outlined in MCO P4450.7, Preparation for Storage. Ensure the weapon is thoroughly cleaned as
outlined in WP 0013 00.

2. Storage Procedures.

- a. Ensure the chamber and magazine do not contain live ammunition.
- b. Inspect the bore and chamber, and apply a medium coat of cleaner, lubricant, and preservative (CLP).
- c. Apply a light coat of CLP to all other metal surfaces of the weapon to provide extra lubrication and corrosion protection.

END OF WORK PACKAGE



CHAPTER 5

SUPPORTING INFORMATION



REFERENCES

SCOPE

This work package lists all forms, field manuals, technical manuals, tables, regulations, standards, and miscellaneous publications referenced in this manual and relevant to this weapon.

MARINE CORPS ORDERS

Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Contamination Avoidance	MCWP 3-37.2A
Multiservice Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and	
Nuclear Decontamination	MCWP 3-37.3
Preparation for Storage	MCO 4450.7
TECHNICAL MANUALS/ORDERS	
Corrosion Control for Marine Corps Ground Equipment	TM 3080-25/2_
Ground Equipment Record Procedures	TM 4700-15/1
Organizational Corrosion Prevention and Control Procedure for USMC Equipment	TM 4795-12/1
Organizational Maintenance Manual with Repair Parts List for Rifle, 7.62 mm, FN FAL	TM 8370-50127-IN/22
Military Use of Cleaner, Lubricant, and Preservative (CLP) for Weapons and Support Equipment.	TM 9150-15/1_

REFERENCES - CONTINUED

FORMS

Weapon Custody Receipt Card	NAVMC 10520
Memorandum Receipt for Individual Weapons and Accessories	NAVMC 10576
Recommended Changes to Technical Publications	

END OF WORK PACKAGE

SUPPLY SYSTEM RESPONSIBILITY ITEMS (SSRI) LIST

SCOPE

This work package lists Supply System Responsibility Items (SSRI) required for operation of the 7.62 mm, FN FAL. The list contains SSRI that are essential for operating the end item. Refer to Table 1.

EXPLANATION OF COLUMNS

- 1. <u>Column (1) Item Number</u>. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item.
- 2. <u>Column (2) Level</u>. This column identifies the lowest level of maintenance that requires the listed item.

C-Operator/Crew

- 3. Column (3) National Stock Number. This is the NSN assigned to the item, which you can use to requisition it.
- 4. <u>Column (4) Description, Part Number, and CAGEC</u>. This provides the other information you need to identify an item.
- 5. <u>Column (5) Unit of Measure (U/M)</u>. This code shows the physical measure or count of an item, such as package (PG), kit (KT), each (EA), bottle (BT), or bale (BE).
- 6. <u>Column (6) Quantity Recommended (QTY REC'M)</u>. The Qty Rec'm column indicates the quantity recommended.

SUPPLY SYSTEM RESPONSIBILITY ITEMS (SSRI) LIST - CONTINUED

Table 1. SSRI for FN FAL Rifle.

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description, Part Number, and CAGEC	(5) U/M	(6) QTY REC'M
1	С	1005-01-LL-MUS-2807	Rifle, 7.62 MM, FN FAL P/N TBD; CAGEC TBD	EA	1

UNIT USING RESPONSIBILITY ITEMS (UURI) LIST

SCOPE

This work package lists Unit Using Responsibility Items (UURI) authorized for support of the FN FAL rifle. Items listed will not be issued with the weapon and must be requisitioned through the system.

EXPLANATION OF COLUMNS

- 1. <u>Column (1) National Stock Number</u>. Indicates the National Stock Number (NSN) assigned to the item that will be used for requisitioning purposes.
- 2. <u>Column (2) Description, Part Number, and CAGEC</u>, Indicates the Federal item name followed by a minimum description when needed. The entry for each item ends with the Commercial and Government Entity Code (CAGEC) proceeded by the part number.
- 3. <u>Column (3) Usable on Code</u>. Indicates a code if the item needed is not the same for different models of equipment.
- 4. <u>Column (4) Unit of Measure (U/M)</u>. Indicates how the item is issued for the NSN shown in Column (1), such as package (PG), kit (KT), each (EA), bottle (BT), book (BK), or bale (BE).
- 5. Column (5) Quantity Recommended (QTY REC'M). Indicates the quantity recommended.

Table 1. UURI for the FN FAL Rifle.

(1) National Stock Number	(2) Description, Part Number and CAGEC	(3) Usable on Code	(4) U/M	(5) QTY REC'M
9150-01-102-1473	Break-free solvent (CLP), 2/3 oz P/N 900; CAGEC 65983		BT	1
1005-00-288-3565	Patches, cleaning, small caliber, 7.62 mm P/N 5019316, CAGEC 19204		EA	10
1005-00-494-6602	Brush, cleaning, small arms P/N 8448462; CAGEC 19204		EA	1
TBD	Magazine, cartridge: 20 round P/N TBD; CAGEC TBD		EA	6
TBD	Sling, FN FAL		EA	1
1005-01-451-5119	Cleaning kit, gun (7.62 mm, Otis soft belt pack) P/N 308-6; CAGEC 01VS3		EA	1
	OTIS, 7.62 MM CLEANING KIT CON	ISISTS OF:		
TBD	Case, soft pack (w/ ALICE clips) P/N 915-DMR, CAGEC 01VS3		EA	1
1005-01-449-8902	T-Handle P/N C-01-5; CAGEC 01VS3		EA	1

Table 1. UURI for the FN FAL Rifle - Continued.

(1) National Stock Number	(2) Description, Part Number and CAGEC	(3) Usable on Code	(4) U/M	(5) QTY REC'M
07	IIS, 7.62 MM CLEANING KIT CONSISTS OF	: - Continued:		
1005-01-445-6798	Brush, lens, mohair P/N 3762; CAGEC 01VS3		EA	1
9150-01-102-1473	Cleaner, Lubricant, and Preservative P/N 901-T-10; CAGEC 01VS3		BT	1
1005-01-445-5889	Handle, rod, female P/N 9098-5; CAGEC 01VS3		EA	1
1005-01-445-6728	Patch, small caliber, 7.62 mm, circular P/N 970-10; CAGEC 01VS3		EA	10
1005-01-449-9674	Adapter, NATO P/N 316-5; CAGEC 01VS3		EA	1
1005-01-449-8999	Brush, bore, 7.62 mm, P/N 330; CAGEC 01VS3		EA	1
1005-01-449-9282	Brush. chamber, .45 cal, P/N 345, CAGEC 01VS3		EA	1

Table 1. UURI for the FN FAL Rifle - Continued.

(1) National Stock Number	(2) Description, Part Number and CAGEC	(3) Usable on Code	(4) U/M	(5) QTY REC'M
	OTIS, 7.62 MM CLEANING KIT CONSISTS OF	:- Continued:		
TBD	Reflector, bore P/N 905-1, CAGEC 01VS3		EA	
1005-01-449-8928	Brush, end, nylon P/N 318-5; CAGEC 01VS3		EA	1
1005-01-449-9674	Scraper P/N 206-5 CAGEC 01VS3		EA	1
1005-01-449-8928	Brush, end, nylon P/N 318-5; CAGEC 01VS3		EA	1
1005-01-445-6798	Rod, flex, 30" P/N C-30-5; CAGEC 01VS3		EA	1
1005-01-445-4889	Rod, flex, 8" P/N C-8_5 CAGEC 01VS3		EA	1
1005-01-449-9943	Pick, gas port P/N 100-39-5; CAGEC 01VS3		EA	1

Table 1. UURI for the FN FAL Rifle - Continued.

(1) National Stock Number	(2) Description, Part Number and CAGEC	(3) Usable on Code	(4) U/M	(5) QTY REC'M
	OTIS, 7.62 MM CLEANING KIT CONSISTS OF	:- Continued:		
1005-01-449-6728	Brush, compact, all-purpose (A/P) P/N 324 CAGEC 01VS3		EA	1
1005-01-449-8999	Tip, slotted, 7.62 mm P/N 203-5 CAGEC 01VS3		EA	1
1005-01-449-9282	Remover, obstruction, 7.62 mm P/N 105-5 CAGEC 01VS3		EA	1
	END OF OTIS, 7.62 MM CLEANING	KIT		
1005-01-912-4248	Q-tips P/N 240-5		EA	10
9150-00-935-6597	Lubricating oil, semi-fluid P/N MILL 46000; CAGEC 81349 (2 oz.)		ВТ	A/R
9150-00-889-3522	Lubricating oil, semi-fluid P/N 8436793; CAGEC 19204 (4 oz.)		EA	A/R



EXPENDABLE AND DURABLE ITEMS LIST

SCOPE

This work package lists Expendable and Durable Items authorized for the support and operation of the FN FAL rifle.

EXPLANATION OF COLUMNS

- 1. <u>Column (1) Item Number</u>. This column indicates the number assigned to the entry in the list, and is referenced in the narrative instructions to identify the item [e.g., Rag, wiping (Item 8, WP 0019 00,)].
- 2. <u>Column (2) National Stock Number</u>. This is the NSN assigned to the item that will be used for requisitioning.
- 3. Column (3) Item Identification. This provides the other information needed to identify item.
- 4. <u>Column (4) Unit of Measure (U/M).</u> This code shows the physical measurement or count of an item, such as package (PG), quart (QT), each (EA), bottle (BT), box (BX), or bale (BE).

EXPENDABLE AND DURABLE ITEMS LIST - CONTINUED

Table 1. Expendable and Durable Items for the FN FAL Rifle.

(1) Item Number	(2) National Stock Number	(3) Item Identification	(4) U/M
1	9150-01-102-1473	Cleaner, lubricant, preservative (CLP) (65983) 2/3 oz.	BT
2	9920-00-292-9946	Cleaner, tobacco pipe (89855) 36 per pkg package	BX
3	9150-00-292-9689	Lubricating oil, arctic, weapons (LAW) (81349) MIL-L-14107 1 qt (0.95 L) can	QT
4	9150-00-889-3522	Lubricating oil, semi-fluid (19204) (4 oz.)	BT
5	1005-00-912-4248	Patch, small caliber, 7.62 mm	PG
6	1005-01-445-6728	Patch, small caliber, 7.62 mm, circular	PG
7	6515-00-905-1473	Applicator, disposable (Q-tips)	PG
8	7290-00-205-1711	Rag, wiping (58536) A-A-531 50 lb (22.68 kg)	BE

INVENTORY SHEET

Table 1. Inventory Sheet.

Item No.	National Stock Number	Item ID		_	leasu Used Mon	in U	nit									
					J	F	М	Α	M	J	J	Α	S	0	N	D
1		Cleaner, lubricant, and preservative (CLP), 2/3 oz	EA	1												
2		Brush, cleaning, small arms	EA	1												
3		Cleaning kit, gun, (7.62 mm, Otis soft belt pack)	EA	1												

Table 1. Inventory Sheet - Continued.

Item No.	National Stock Number	Item ID	Unit	Qty	easu Used Mon	in U	nit									
					J	F	М	Α	М	J	J	Α	S	0	Ν	D
		OTIS, 7.62 M	M CL	EAN	IIG K	IT C	ONSI	STS	OF:							
4	TBD	Case, soft pack	EA													
5	1005-01-449-8902	T-Handle	EA	1												
6		Cleaner, lubricant, and preservative	EA	1												
7	1005-01-445-6798	Brush, lens, mohair	EA	1												
8	1005-01-445-5889	Handle, rod, female	EA	1												

Table 1. Inventory Sheet - Continued.

Item No.	National Stock Number	Item ID	Unit	Qty l		in U	nit									
					J	F	M	Α	М	J	J	Α	S	0	N	D
9		Patch, small caliber, 7.62 mm, circular	EA	10												
10	1005-01-449-9674	Adapter, NATO	EA	1												
11	1005-01-449-8999	Brush, bore, 1.62 mm	EA	1												
12	1010-01-445-6799	Brush, end	EA	1												
13	1005-01-449-9282	Brush, chamber, .35 cal	EA	1												
14	TBD	Bore lite, fiber optic	EA	1												

Table 1. Inventory Sheet - Continued.

Item No.	National Stock Number	Item ID	Unit	Qty I	easu Jsed Mon	in U	nit									
					J	F	М	Α	М	J	J	Α	S	0	N	D
15	1005-01-449-8928	Brush, end, nylon	EA	1												
16	1005-01-445-6798	Rod, flex, 30"	EA	1												
17	1005-01-445-4889	Rod, flex, 8"	EA	1												
18	1005-01-449-9943	Pick, gas port	EA	1												
19	1005-01-449-6728	Brush, compact, all-purpose (A/P)	EA	1												
20	1005-01-449-9674	Scraper	EA	1												

Table 1. Inventory Sheet - Continued.

Item No.	National Stock Number	Item ID	Unit	Qty	easu Used Mon	in U	nit									
					J	F	M	Α	M	J	J	Α	S	0	N	D
21	1005-01-449-8999	Tip, slotted, 7.62 mm	EA	1												
22		Remover, obstruction, 7.62 mm	EA	1												
23	TBD	Cleaner, lens	EA	1												
24	TBD	Cloth, lens	EA	1												
25	TBD	Handle, rod, male	EA	1												
		END OF C	OTIS,	7.62	MM	CLE	ANIN	G KI	T							

Table 1. Inventory Sheet - Continued.

Item No.	National Stock Number	Item ID		of M Qty l		in U	nit									
					J	F	М	Α	M	J	J	Α	S	0	N	D
26	TBD	Rod, cleaning, FN FAL	EA	1												
27	TBD	Magazine, 20 cartridge	EA	6												
28	TBD	Sling, FN FAL	EA	1												
30		Lubricating oil, semi- fluid	EA	A/R												

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