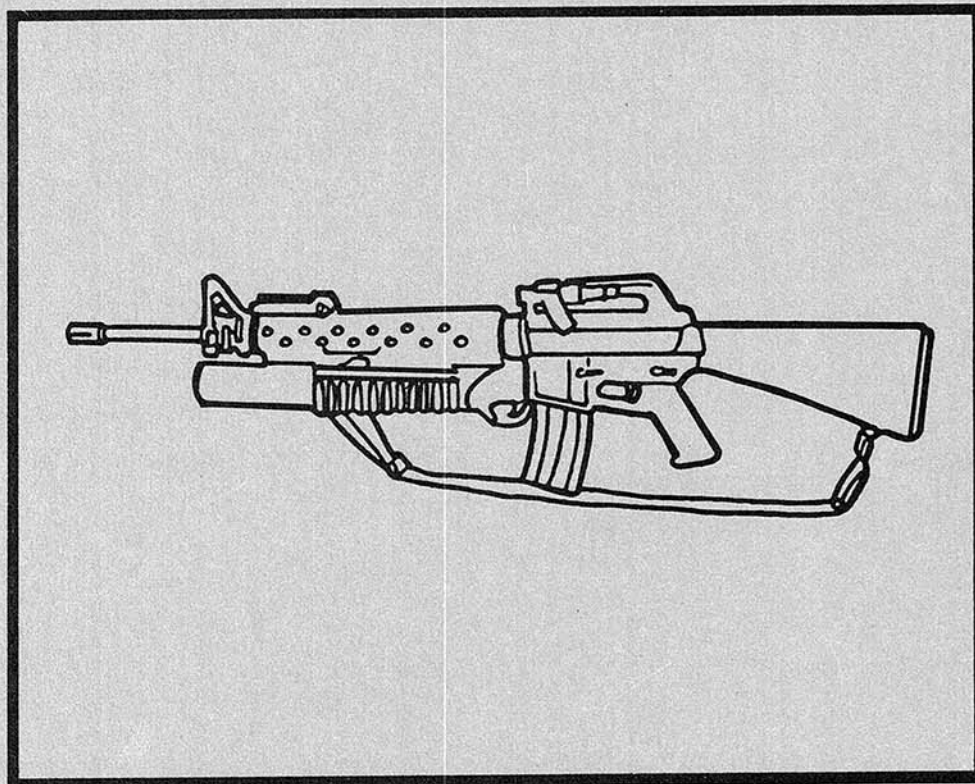


# CLEANING AND LUBRICATING THE M203 GRENADE LAUNCHER

TEC LESSON NO. 551-101-8360-A



PRODUCED BY  
US ARMY QUARTERMASTER  
SCHOOL  
FORT LEE, VIRGINIA



January 1982

Student/Supervisor Instructions and Pretest/Posttest are  
contained within this  
Lesson

Digitized by:

READ THE STUDENT/SUPERVISOR INSTRUCTIONS CAREFULLY.  
BE SURE YOU UNDERSTAND THEM BEFORE CONTINUING THE LESSON.

When used in this publication, "he," "him," "his,"  
and "men" represent both the masculine and feminine  
genders unless otherwise stated.

STUDENT/SUPERVISOR INSTRUCTIONS

AUDIENCE

- MOS 76Y
- Skill levels 1 and 2

TRAINING OBJECTIVE

Given the equipment and materials required, the soldier will be able to:

- Clean the M203 grenade launcher.
- Lubricate the M203 grenade launcher.

MATERIAL/EQUIPMENT/PERSONNEL REQUIRED TO COMPLETE THIS LESSON

- Pen or pencil
- Lesson booklet
- M16A1 rifle with grenade launcher
- Armorer tool kit
- Dummy round
- TM 9-1010-221-24
- GTA No. 10-8-3, M203 Layout Chart
- Cleaning and Lubricating Job Aid No. 551-101-8360-J
- Vise
- Cleaning and lubricating materials and supplies

## TIME REQUIRED

- Soldier must complete the task within 30 minutes.

## REFERENCES

- TM 9-1010-221-24

## STUDENT INSTRUCTIONS

- Before taking this lesson, complete TEC Lesson No. 551-101-8359-A, "Disassembly and Assembly of the M203 Grenade Launcher."
- Take the pretest. If you pass the pretest, you need not take this lesson.
- Insure that you have all material, equipment, or personnel required to complete this lesson.
- Read this lesson. Practice each step in the lesson until you can do it without looking at the book.
- Take the posttest. If you do not pass, read the lesson again and repeat the test.
- It is very important that you read every step in this lesson. Do not skip around and do the steps out of order. You could hurt yourself or harm the equipment. Do not do anything that is not explained in the lesson booklet, and observe all safety warnings. Safety warnings are printed in red. These are cautions or warnings you must observe so that you do not injure yourself or harm the equipment.
- Keep track of all dummy rounds. Keep them locked in your tool kit or some other location separate from live ammunition.
- Always clear any weapon before you work on it.
- Read all CAUTIONS printed in red BEFORE doing the next step.
- Be extra careful when working with springs that can fly out. Wear safety goggles.
- Do not write on this lesson booklet.

## SUPERVISOR INSTRUCTIONS

- Insure that the student has completed the prerequisites listed above.
- Insure that the student has all material, equipment, or personnel required to complete this lesson.
- This lesson is self-teaching and self-paced. The soldier will learn the task by reading and doing the steps in the lesson. He can use as much time as needed, within reasonable limits, to learn the task.
- As a supervisor, you should be familiar with the lesson material so you can answer questions, score tests, and insure that all safety precautions and warnings are followed.
- Although this is a self-teaching program, it may be necessary for you to assist the soldier if he has difficulties. Everything the soldier needs to know to pass the test is in this booklet. When a soldier does not understand a step, it is usually because he is going too fast and skips a step. Reading the section again will often solve the problem. Occasionally, a soldier will not understand the whole lesson. If you are familiar with the weapon, you may explain the steps; or, if you will read the lesson yourself, you should be able to explain it to the soldier. If the weapon becomes jammed or is disassembled beyond organizational level, and neither you nor the soldier can remedy the problem, take it to direct support maintenance for repair.
- Allow the student to read the lesson and practice the task before testing.
- Follow set-up and scoring instructions for the test.
- Do not aid the soldier in taking the test.
- Observe the soldier's performance in the pretest/posttest.
- Score each performance measure as GO/NO GO.
- Be sure the soldier completes the task within the required time limit.

CORRESPONDING JOB PERFORMANCE AID ATTACHED

PRETEST/POSTTEST

Type of Lesson: Quartermaster

TEC Lesson No.  
551-101-8360-A

Cleaning and Lubricating the M203 Grenade Launcher

General Information

This pretest/posttest covers cleaning and lubricating the M203 grenade launcher. In order to pass the test, the soldier must receive a GO on all performance measures and must complete the test within 30 minutes. If he fails the test, the lesson must be repeated and the test retaken. The following items must be arranged on a table for the soldier's use during the test:

- Pen or pencil
- M16A1 rifle with M203 grenade launcher attached
- Armorer tool kit
- Dummy round
- TM 9-1010-221-24
- GTA No. 10-8-3, M203 Layout Chart
- Cleaning and Lubricating Job Aid No. 551-101-8360-J
- Vise, NSN 5120-00-243-1372
- Cleaning and lubricating materials:
  - Cleaning compound
  - Rifle bore cleaner (RBC), NSN 6850-00-224-6657
  - Drycleaning solvent (SD), NSN 6850-00-281-1985
  - Lubricating oil, semifluid (LSA), NSN 9150-00-687-4241
- Cleaning and lubricating supplies:
  - Four rags, wiping (cotton), NSN 7920-00-205-1711
  - Cleaning brush, NSN 1010-00-474-5466
  - Thong, bore brush, NSN 1010-00-474-5465
  - Ten cleaning swabs, NSN 7920-00-205-2401

The scorer must have a watch, a pen or pencil, paper, and the list of performance measures.

Test Instructions:

Your task is to clean and lubricate the M203 grenade launcher on the table. All the tools, parts, materials, supplies, and forms you need are also on the table. Remember, you must CLEAR THE WEAPON before and after working on it. This means clear both the M16A1 rifle and the grenade launcher. You will have 30 minutes to complete the test.

---

NOTE TO SUPERVISOR/SCORER:

Please review the supervisor instructions at the beginning of this lesson and the information printed above and on the preceding page. Be sure that all of the items listed on the preceding page are available for use during the test. Read aloud the test instructions to the soldier, and begin timing his performance. Do not let the soldier continue past the time limit. On a separate sheet of paper, write GO or NO GO for each of the performance measures listed below and on the following page.

---

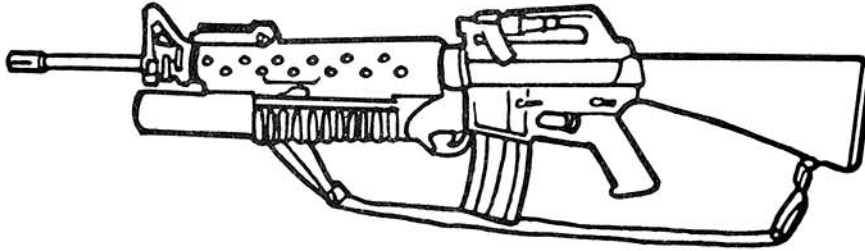
DO NOT WRITE ON THIS TEST.

Performance Measures:

	<u>GO</u>	<u>NO GO</u>
1. The soldier cleans the weapon:		
a. The soldier pulls a rag soaked with RBC through the bore.	_____	_____
b. The soldier pulls the bore brush through the bore.	_____	_____
c. The soldier cleans the receiver cavity with RBC.	_____	_____
d. The soldier cleans the face of the breech insert with a swab and RBC.	_____	_____
e. The soldier cleans the firing pin recess with a swab and RBC.	_____	_____
f. The soldier cleans the rest of the launcher parts with a rag and RBC.	_____	_____

	<u>GO</u>	<u>NO GO</u>
2. The soldier lubricates the weapon:		
a. The soldier draws a cloth lightly oiled with LSA through the bore.	_____	_____
b. The soldier lubricates the receiver cavity with LSA.	_____	_____
c. The examinee applies one drop of LSA into the firing pin recess.	_____	_____
d. The soldier holds the launcher pointed up for a few seconds.	_____	_____
e. The soldier applies a few drops of LSA to the safety detent.	_____	_____
f. The soldier operates the safety a few times.	_____	_____
g. The soldier lubricates the rest of the launcher parts with LSA.	_____	_____
3. The soldier completes the test within 30 minutes.	_____	_____

## CLEANING AND LUBRICATING THE M203 GRENADE LAUNCHER



M16A1 Rifle With M203 Grenade Launcher Attached

### INTRODUCTION:

This is TEC Lesson No. 551-101-8360-A, "Cleaning and Lubricating the M203 Grenade Launcher." This lesson will show you how to clean and lubricate the M203 grenade launcher. The individual soldier is responsible for cleaning his own weapon. However, it is your responsibility to clean and lubricate unassigned weapons, and to make sure the operator has cleaned his own weapon. Always remember to CLEAR THE WEAPON first. This means clear both the M16A1 rifle and the M203 grenade launcher even if you are only cleaning and lubricating the grenade launcher. You must clear both again when you finish.

### EQUIPMENT/MATERIALS REQUIRED:

Items listed in Student/Supervisor Instructions on page i.

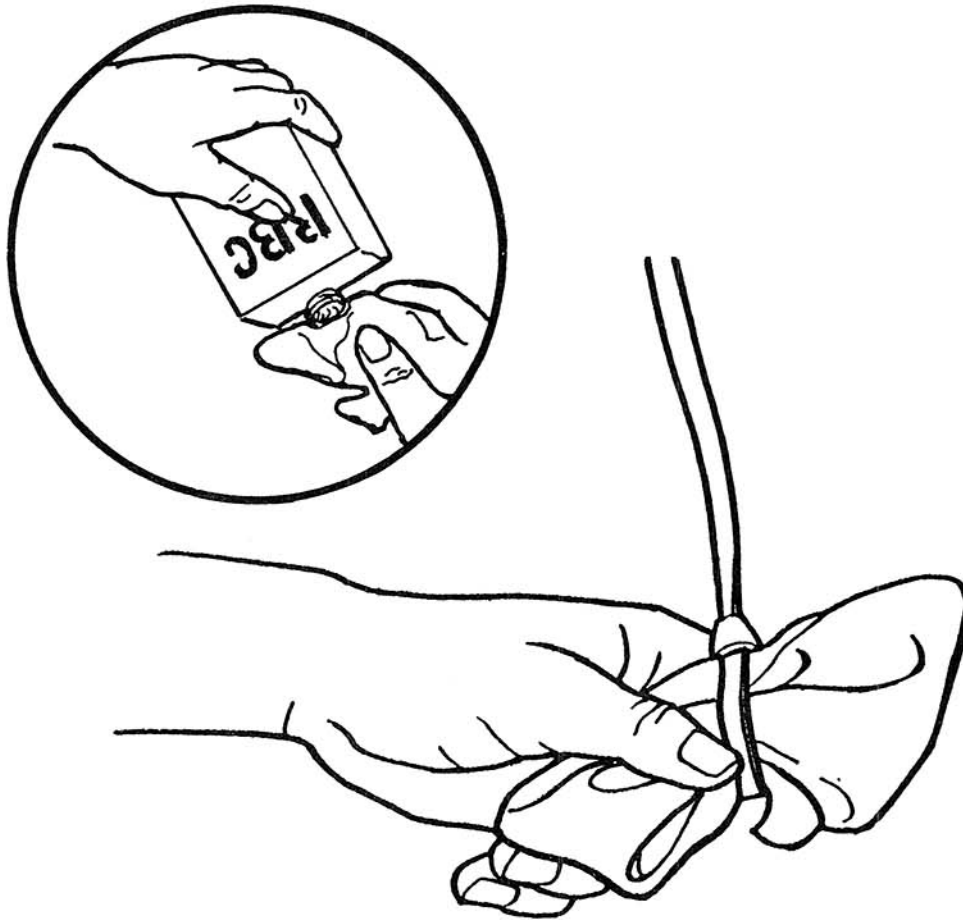
## HOW TO CLEAN AND LUBRICATE THE M203 GRENADE LAUNCHER

### PREPARE THE WEAPON

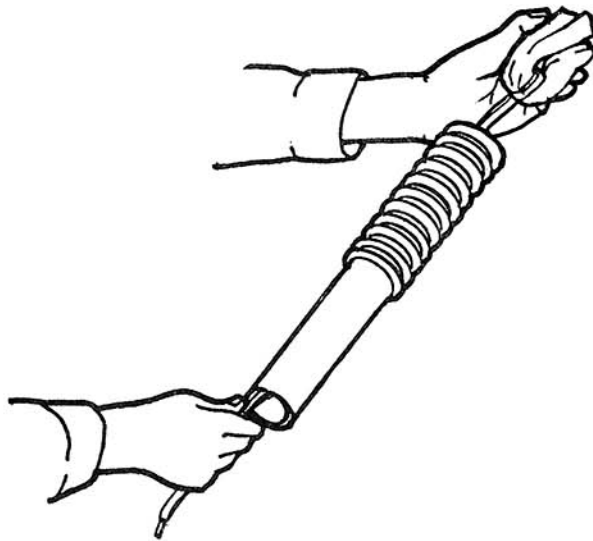
- STEP 1. Clear the launcher. Go back to TEC Lesson No. 551-101-8358-A if you don't remember how to do this.
- STEP 2. Disassemble the launcher. Go back to TEC Lesson No. 551-101-8359-A if you don't remember how to do this.

### CLEAN AND LUBRICATE BARREL BORE

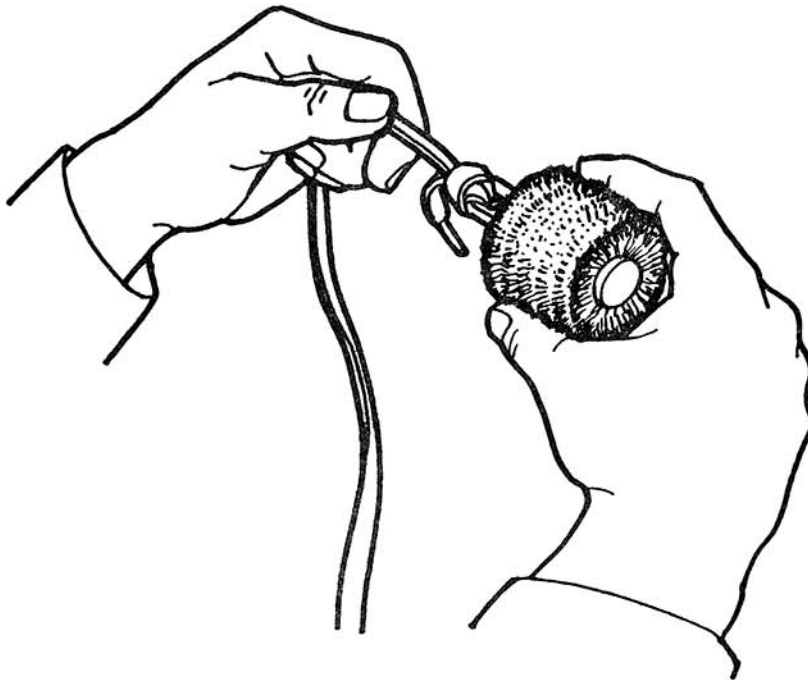
- STEP 1. Soak a rag with RBC. Attach the rag to the thong as shown.



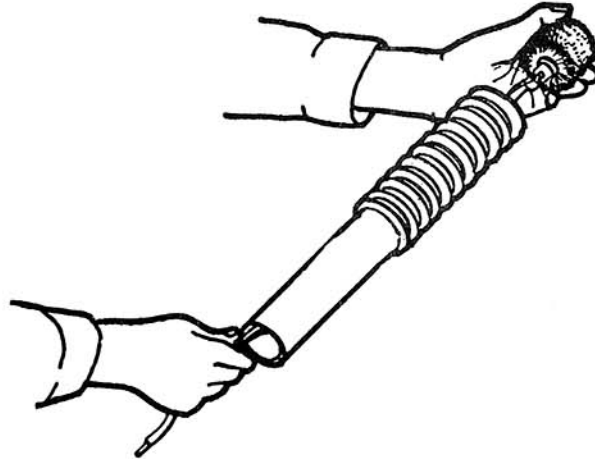
STEP 2. Pull the rag through the bore several times.



STEP 3. Take the rag off the thong and put on the bore brush.



STEP 4. Pull brush through the bore several times.



STEP 5. Soak a rag with RBC. Take the bore brush off and put on the rag.

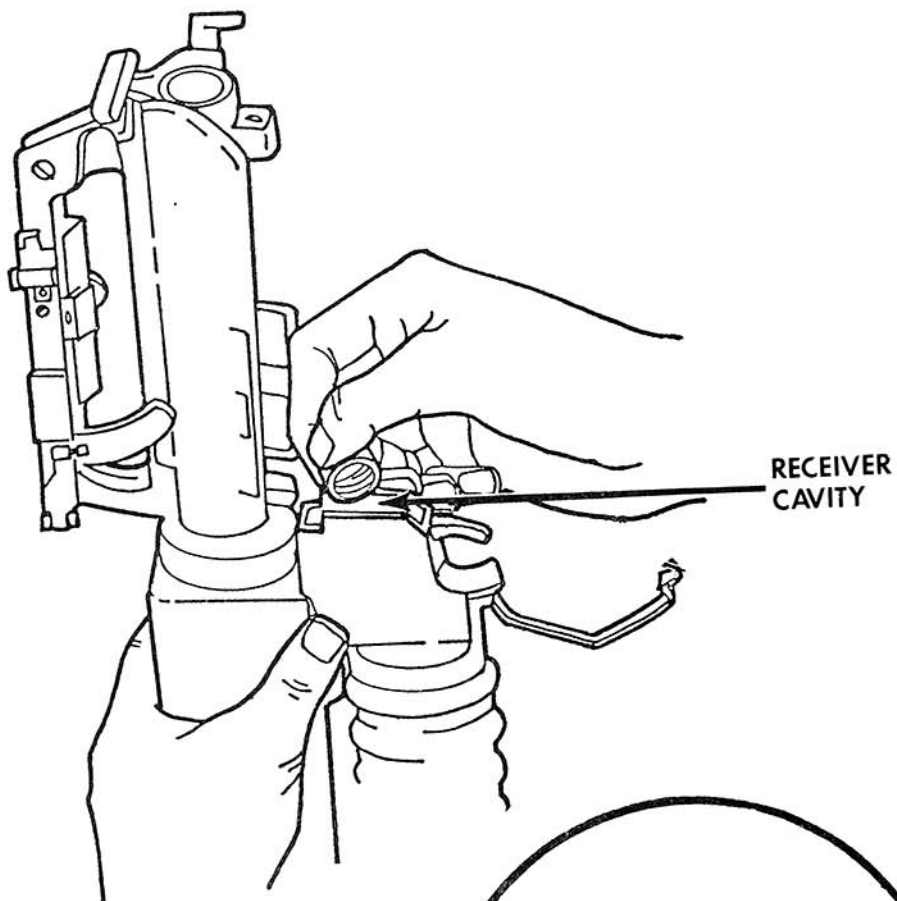
STEP 6. Pull the rag soaked in RBC through the bore several times.

STEP 7. Put a dry clean rag on the thong and run it through the bore.

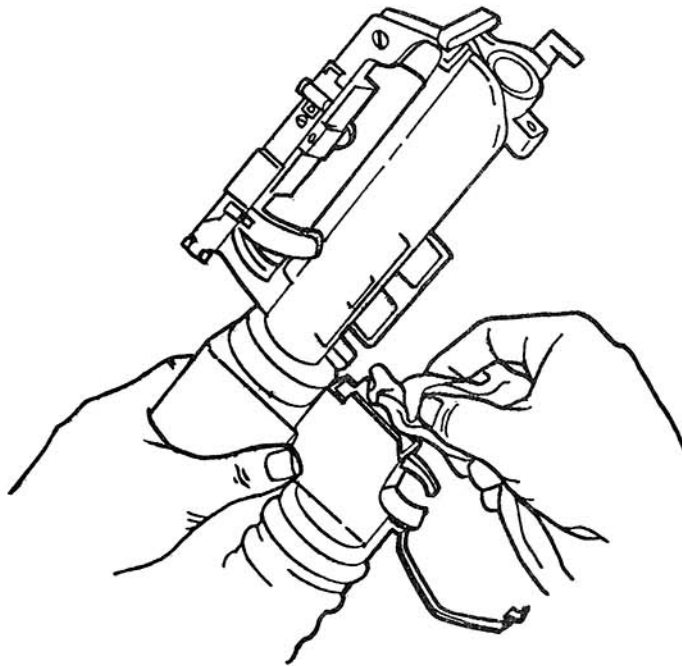
STEP 8. Put a few drops of LSA on a clean rag. Attach rag to thong and run it through the bore one time.

STEP 9. Install the barrel assembly. If you don't remember how to do this, go back to TEC Lesson No. 551-101-8359.

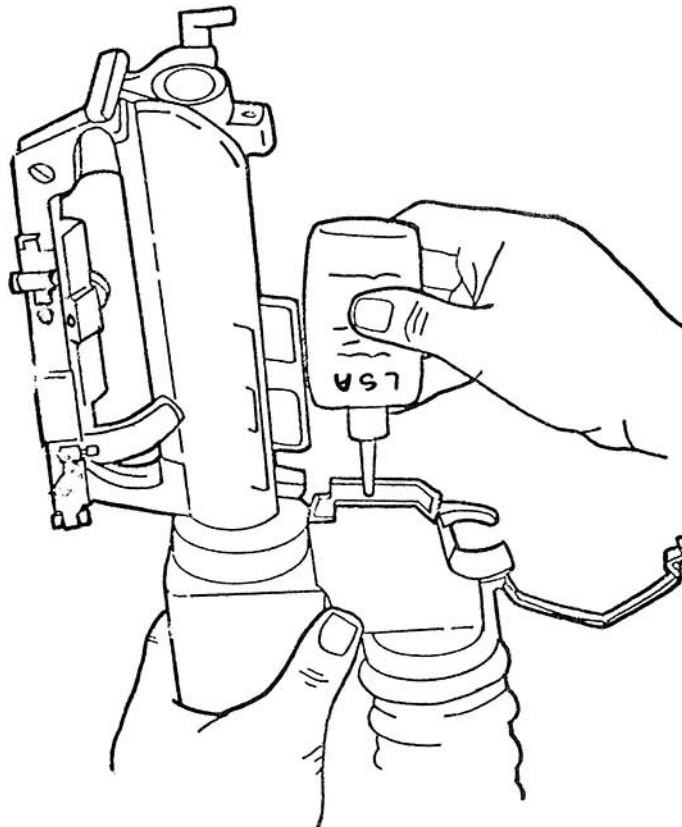
STEP 10. Pour 2 to 3 drops of RBC into the receiver cavity.



STEP 11. Wipe dry with a rag.



STEP 12. Squeeze 2 or 3 drops of LSA into receiver cavity as shown.



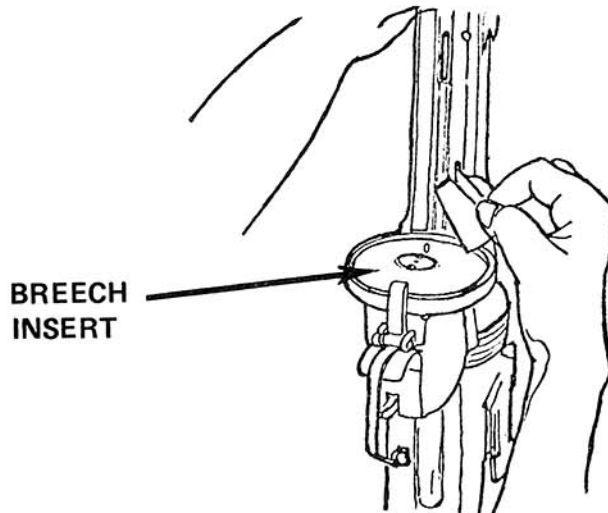
STEP 13. Soak a rag in RBC. Wipe clean the backplate and follower.  
Dry with a clean rag.

STEP 14. Get a clean rag and put some LSA on it. Wipe back plate and  
follower, leaving a light coat of oil.

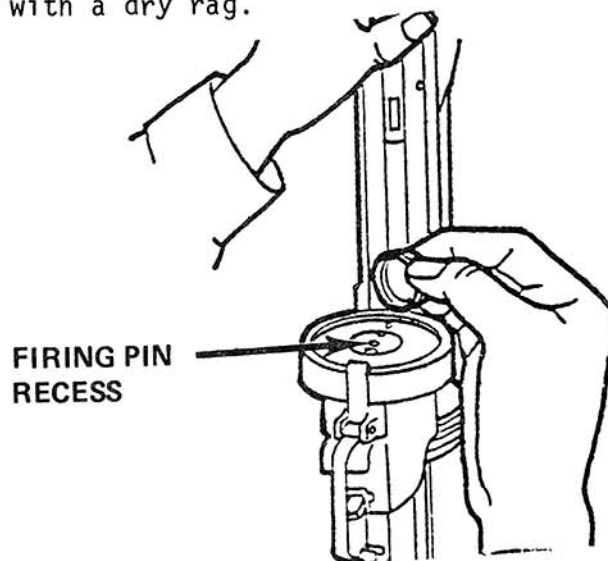
STEP 15. Open the barrel only 1/2 inch and install backplate and  
follower.

#### CLEAN AND LUBRICATE BREECH INSERT AND FIRING PIN RECESS

STEP 1. Soak a swab in RBC. Wipe the face of the breech insert with  
it until it is clean.

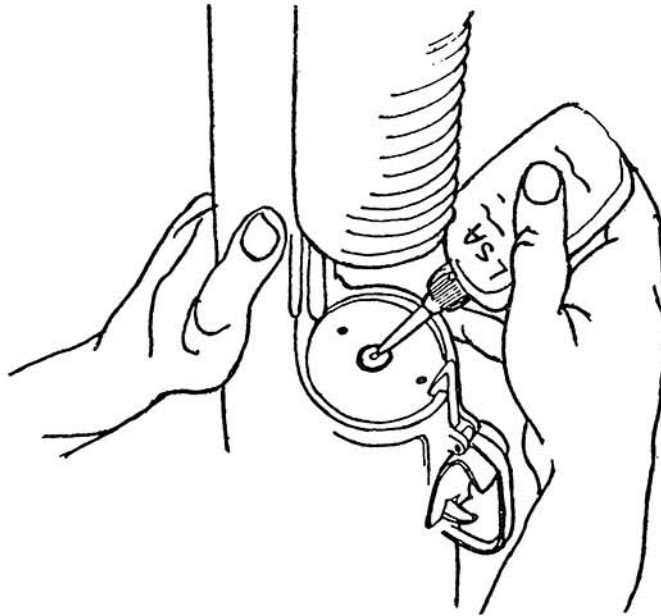


STEP 2. Put one drop of RBC into the firing pin recess (hole in  
the breech insert). Wipe the breech insert and firing pin  
recess with a dry rag.



STEP 3. Put a few drops of LSA on a swab and wipe the face of the breech insert.

STEP 4. Put only one drop of LSA into the firing pin recess. Hold the weapon up for 10 seconds.



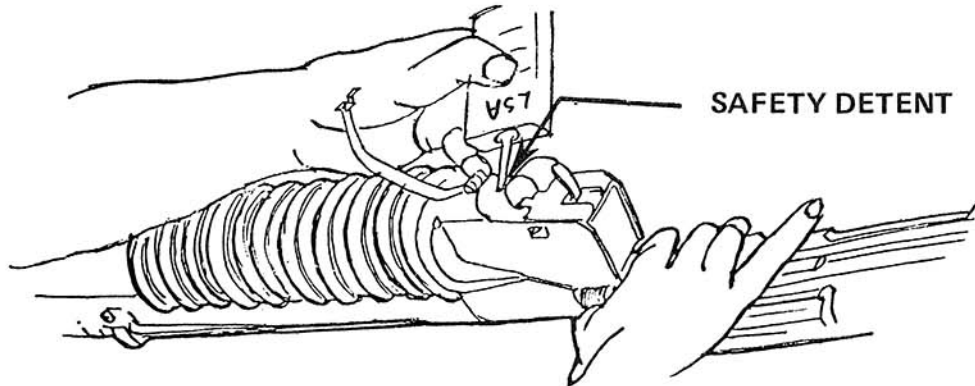
STEP 5. Hand function the launcher several times to spread the LSA.

### CLEAN AND LUBRICATE SAFETY DETENT

STEP 1. Turn launcher upside down. Push safety forward to the SAFE position.

Wipe the safety clean with swab soaked in RBC.

STEP 2. Put one drop of LSA into safety detent.



STEP 3. Operate safety 2 or 3 times and leave on SAFE position.

### CLEAN AND LUBRICATE ALL OTHER PARTS

STEP 1. Clean all remaining parts with a rag soaked in RBC. Wipe dry with a clean rag.

STEP 2. Put a few drops of LSA on a clean rag. Wipe all remaining parts leaving a light coat of oil.

STEP 3. Assemble the launcher.

STEP 4. Hand function the launcher.

STEP 5. Do the safety test on the launcher.

STEP 6. Clear the launcher.

## HOW TO CLEAN A WEAPON THAT HAS HARD CARBON RESIDUE

If the weapon has a hard carbon residue, use P-C-111 to remove it.

You will not be required to do this in this lesson, but you must know how to do it.

### WARNING

P-C-111 is very strong and will cause burns if it touches your skin. For this reason, you must be very careful when you use it. WEAR RUBBER GLOVES! If you should accidentally splash some on your skin, immediately wash it off thoroughly with running water; then apply a Lanolin base cream.

- STEP 1: CLEAR THE WEAPON.
- STEP 2: Disassemble the weapon.
- STEP 3: Put on rubber gloves.
- STEP 4: Get a can (#10 size) and P-C-111. Half fill the can with P-C-111.
- STEP 5: Get a dry rag and wipe all loose dirt, grease and oil from the parts.
- STEP 6: Place the parts in the can. Be sure they are totally covered.
- STEP 7: Soak the parts for two to eight hours, depending on how much carbon has built up.
- STEP 8. While the parts are soaking, fill a can with water and another can with dry cleaning solvent (SD). Now get a bristle brush.
- STEP 9: When the carbon build-up has softened enough to brush off, remove the parts from the P-C-111 and rinse the parts off in the can of water, then clean the parts in the can of SD.
- STEP 10: Take each part from the SD and brush the part with the bristle brush. Place the parts on the table.

STEP 11: Dry each part with a dry rag.

STEP 12: Wipe each part with PLS and a rag.

STEP 13: Assemble the weapon.

STEP 14: Hand function the weapon.

STEP 15: Perform the safety tests.

STEP 16: Clear the weapon.

STEP 17: Oil the outside surface of the weapon.

HOW TO CLEAN AND LUBRICATE THE WEAPON UNDER UNUSUAL CLIMATE CONDITIONS

- A. In very cold temperatures (below 30° F):
1. Keep the weapon covered as much as possible.
  2. If you put too much oil on the working parts, it can get sticky and cause sluggish operation or complete failure of the weapon.
- B. In extreme cold temperatures (below 0° F):
1. Use weapons lubricating oil (LAW) when you lubricate the weapon.
  2. The weapon must be completely disassembled, cleaned and lubricated before use.
  3. Hand function the weapon daily to be sure it is functioning smoothly.
- C. In hot weather where humidity is high and/or salt is present:
1. Inspect each weapon daily for signs of rust. Dry, clean, and lubricate any time the weapon does not function smoothly.
- D. In hot, dry climates where sand and dust are present:
1. All lubricants should be removed from the weapon.
  2. Weapons should be wiped clean and dry.

## SELF-EVALUATION

Write the correct answers on a separate sheet of paper.

DO NOT WRITE ON THIS SELF-EVALUATION.

1. Each part of the launcher is cleaned with:
  - a. P-C-111
  - b. RBC
  - c. Soap and water
  
2. How do you clean the receiver cavity?
  - a. Wire brush and RBC
  - b. Pouring a few drops of RBC into it
  - c. Wire rod and RBC
  
3. Too much oil in the back of the breech insert could cause:
  - a. Failure of M203 to fire
  - b. Barrel assembly to jam
  - c. Failure of M16A1 to fire
  
4. Scratched or worn surfaces should be touched up with:
  - a. LSA
  - b. Solid film lubricant
  - c. LAW
  
5. The launcher should be lubricated:
  - a. Every 90 days or as determined by Unit SOP
  - b. Daily
  - c. Twice a week

The correct answers are on the back of this page.

ANSWERS TO SELF-EVALUATION

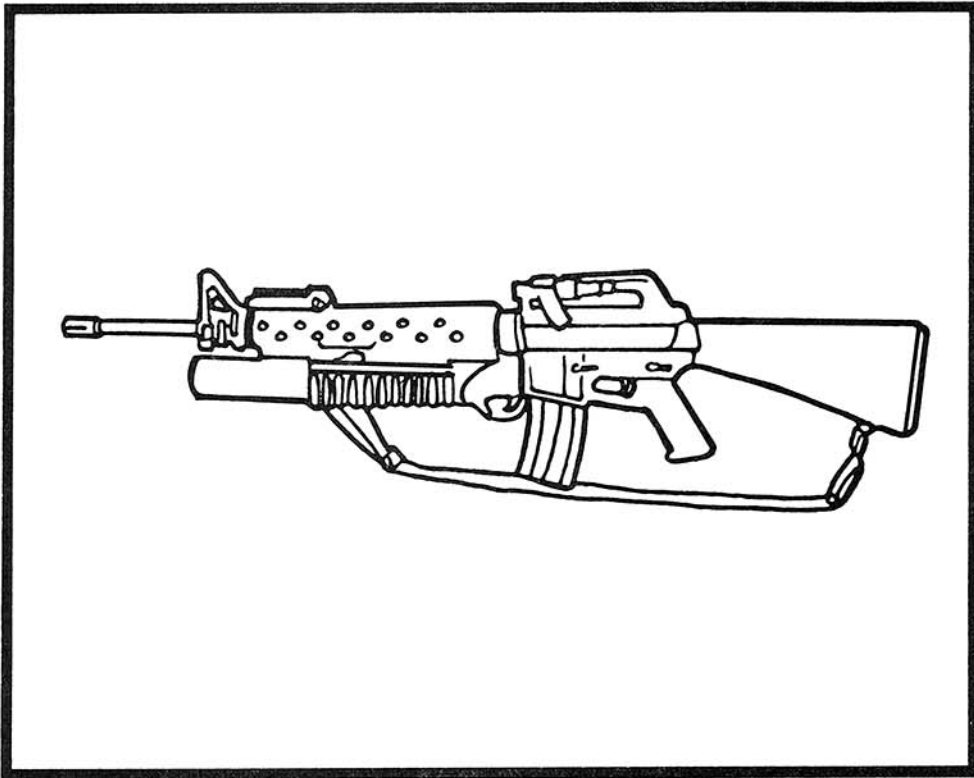
1. b, RBC
2. b, pouring a few drops of RBC into it
3. a, failure of M203 to fire
4. b, solid film lubricant
5. a, every 90 days or as determined by Unit SOP

WHEN YOU HAVE COMPLETED THIS SELF-EVALUATION,  
ASK YOUR SUPERVISOR TO GIVE YOU THE POSTTEST.

# JOB AID

## CLEANING AND LUBRICATING THE M203 GRENADE LAUNCHER

JOB AID NO. 551-101-8360-J



PRODUCED BY  
US ARMY QUARtermaster  
SCHOOL  
FORT LEE, VIRGINIA



January 1982

When used in this publication, "he," "him," "his,"  
and "men" represent both the masculine and feminine  
genders unless otherwise stated.

## INTRODUCTION

This is Job Aid No. 551-101-8360-J, "Cleaning and Lubricating the M203 Grenade Launcher." This job aid lists the steps to follow when cleaning and lubricating the M203 Grenade launcher.

You must have this job aid to do TEC Lesson No. 551-101-8360-A. You should also use this booklet as a reference to help you with other TEC lessons and when you must perform these tasks in your job.

CLEANING AND LUBRICATING THE M203  
GRENADE LAUNCHER JOB AID

To correctly clean and lubricate the M203 grenade launcher you must do each of the following steps:

STEP 1. Clear the M203 grenade launcher.

STEP 2. Disassemble the M203 grenade launcher.

STEP 3. Barrel Bore

- a. Pull RBC rag through several times
- b. Pull brush through several times
- c. Pull RBC rag through several times
- d. Pull clean rag through several times
- e. Pull LSA rag through ONE time

STEP 4. Receiver Cavity

- a. Pour few drops of RBC into it
- b. Wipe dry with cotton rag
- c. Put 2 or 3 drops of LSA into it
- d. Clean and lubricate backplate and follower

STEP 5. Breech Insert

- a. Wipe face with RBC swab
- b. Dry with clean swab
- c. Lubricate with LSA swab

STEP 6. Firing Pin Recess

- a. Squeeze one drop of RBC into it
- b. Dry with swab
- c. Squeeze one drop of LSA into it
- d. Hold for 10 seconds
- e. Hand function SEVERAL times

STEP 7: Safety Detent

- a. Wipe clean with RBC swab
- b. Squeeze one drop of LSA into it
- c. Operate safety

STEP 8. All other parts

- a. Wipe clean with RBC rag
- b. Wipe dry with clean rag
- c. Wipe with LSA rag

STEP 9. Reassemble the weapon. Make sure there are no parts left on the layout chart. Hand function the weapon.