

Maintain the M240B Machine Gun
071-SAWE03 / Version 1.0
Effective Date 08 Mar 2013

SECTION I. ADMINISTRATIVE DATA

All Courses Including This Lesson

<u>Course Number</u>	<u>Version</u>	<u>Course Title</u>
None		

Task(s) Taught(*) or Supported

<u>Task Number</u>	<u>Task Title</u>
Individual	
071-025-0001 (*)	Maintain an M240B Machine Gun
071-025-0006	Zero an M240B Machine Gun
071-025-0007	Engage Targets with an M240B Machine Gun

Reinforced Task(s)

<u>Task Number</u>	<u>Task Title</u>
071-025-0002	Perform a Function Check on an M240B Machine Gun

Knowledge

<u>Knowledge Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
071-MNT-0002	Demonstrate Knowledge of Maintenance Procedures	Yes	No
071-WPN-0059	Identity and Location of Parts of Infantry Weapons	No	Yes
071-WPN-0060	Weapons Assembly and Disassembly	Yes	No
071-WPN-0061	Weapons Maintenance	Yes	No
071-WPN-0063	Weapons Functions	Yes	No

Skill

<u>Skill Id</u>	<u>Title</u>	<u>Taught</u>	<u>Required</u>
071-WPN-0010	Perform a Function Check on Infantry Weapons	No	Yes
071-WPN-0011	Identify Operational Parts	Yes	No
071-WPN-0014	Use Cleaning Materials	No	Yes
071-WPN-0005	Ability to Load and Unload Infantry Weapons	No	Yes
071-WPN-0006	Clear Infantry Weapons	No	Yes
071-WPN-0029	Maintain Infantry Weapons	Yes	No

**Administrative/
Academic
Hours**

The administrative/academic hours required to teach this lesson are as follows:

<u>Academic</u>	<u>Resident Hours / Methods</u>		
Yes	0 hrs	10 mins	Lecture
Yes	1 hr	25 mins	Conference/Demonstration
Yes	2 hrs	0 mins	Practical Exercise (Hands-On)
Yes	0 hrs	5 mins	Conference/Discussion
Yes	0 hrs	0 mins	Test Review
Yes	0 hrs	0 mins	Test
<hr/>			
Total Hours:	3 hrs	40 mins	

**Test Lesson
Number**

<u>Hours</u>	<u>Lesson Number</u>
None	

**Prerequisite
Lesson(s)**

<u>Lesson Number</u>	<u>Lesson Title</u>
None	

**Training
Material
Classification**

Security Level: This course/lesson will present information that has a Security Classification of: U - Unclassified.

**Foreign
Disclosure
Restrictions**

FD7. This product/publication has been reviewed by the training/educational developers in coordination with the DOTD, MCoE, Ft Benning, GA 31905 FD authority. This product is NOT releasable to students from foreign countries.

References

<u>Number</u>	<u>Title</u>	<u>Date</u>	<u>Additional Information</u>
FM 3-22.68	Crew-Served Machine Guns, 5.56-MM and 7.62-MM	21 Jul 2006	
TM 9-1005-313-10	OPERATORS MANUAL FOR MACHINE GUN, 7.62MM, M240 (NSN 1005-01-025-8095) M240B (1005-01-412-3129) M240C (1005-01-085-4758) M240D (1005-01-418-6995) M240E1 (1005-01-252-4288) M240G (1005-01-359-2714) M240N (15 Nov 2002	

**Student Study
Assignment**

NONE.

**Instructor
Requirements**

Complete a risk management worksheet. It is recommended that you use the ground risk assessment tools provided by the US ARMY COMBAT READINESS/SAFETY CENTER at https://grat.safety.army.mil/ako_auth/grat/default.aspx

**Additional
Support
Personnel
Requirements**

<u>Name</u>	<u>Student Ratio</u>	<u>Qty</u>	<u>Man Hours</u>
NCOIC	1:32		
Combat Lifesaver	1:32		

**Equipment
Required
for Instruction**

<u>ID - Name</u>	<u>Student Ratio</u>	<u>Instructor Ratio</u>	<u>Spt</u>	<u>Qty</u>	<u>Exp</u>
* GTA 07-01-044 - M240B Machine Gun Disassembly Mat	1:8				No
1005-00-288-3565 - SWAB,SMALL ARMS CLEANING	1:8	0:0	No	0	Yes
1005-00-350-4100 - BRUSH,CLEANING,SMALL ARMS	1:8	0:0	No	0	No
1005-00-603-4834 - ELEVATING AND TRAVERSING MECHANI	1:8	0:0	No	0	No
1005-01-044-1026 - BARREL,MACHINE GUN	1:8	0:0	No	0	No
1005-01-412-3129 - MACHINE GUN,7.62 MILLIMETER	1:8	0:0	No	0	No
1005-01-433-1617 - MOUNT,TRIPOD,MACHINE GUN	1:8	0:0	No	0	No
1005-01-536-9646 - CASE,BARREL,MACHINE GUN	1:8	0:0	No	0	No
4933-01-033-1503 - TOOL,COMBINATION	1:8	0:0	No	0	No
4933-01-033-1504 - SCRAPER,COMBINATION	1:8	0:0	No	0	No
4933-01-033-1510 - EXTRACTOR,RUPTURED CARTRIDGE CAS	1:8	0:0	No	0	No
4933-01-033-8324 - COMBINATION WRENCH W/BRASS HAMMER M240	1:8	0:0	No	0	No
4933-01-047-3394 - REAMERS,CLEANING	1:8	0:0	No	0	No
5110-01-516-3219 - WEAPONS CLEANING KIT, M60	1:8	0:0	No	0	No
6545-01-254-9551 - MES,COMBAT LIFESAVER- 1999	1:32	0:0	No	0	No
6730-00-933-4871 - Screen, Projection	1:32	0:0	No	0	No
6730-01-363-4544 - PROJECTOR,MULTIMEDIA	1:32	0:0	No	0	No
6850-00-224-6657 - CLEANING COMPOUND,RIFLE BORE	1:8	0:0	No	0	Yes
7010-01-188-8051 - COMPUTER SYSTEM,DIGITAL	1:32	0:0	No	0	No
7520-01-424-4867 - EASEL,DISPLAY AND TRAINING	1:32	0:0	No	0	No
9150-01-079-6124 - CLEANER,LUBRICANT AND PRESERVATI	1:8	0:0	No	0	Yes
9920-00-292-9946 - CLEANER,TOBACCO PIPE	1:8	0:0	No	0	Yes

(Note: Asterisk before ID indicates a TADSS.)

**Materials
Required**

Instructor Materials:

TM 9-1005-313-10 Operators Manual M240 Machine Gun

TM 9-1005-344-10 M122 Operators Manual Tripod

Student Materials:

Note taking material.

Field Uniform.

**Classroom,
Training Area,
and Range
Requirements**

<u>ID - Name</u>	<u>Quantity</u>	<u>Student Ratio</u>	<u>Setup Mins</u>	<u>Cleanup Mins</u>
17120-1080-50 GEN INST BLDG, 1080 SF, 50 PN		1:32	15	15

**Ammunition
Requirements**

<u>DODIC - Name</u>	<u>Exp</u>	<u>Student Ratio</u>	<u>Instruct Ratio</u>	<u>Spt Qty</u>
None				

**Instructional
Guidance**

NOTE: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

Before presenting this lesson:

1. Have on hand identified reference material linked to the lesson plan.
2. Review presentation and develop a list of questions to use during class.
3. Review and prepare conference / discussion material presented.
4. Ensure all equipment listed for this lesson plan (LP) is present, operable, and set up for use before class.
5. Refer to the practical exercise of this lesson plan. When necessary develop additional situations to use during the practical exercise.
6. PowerPoint users: Ensure the SLI file you are using has been called up using Microsoft PowerPoint Viewer and SLI / slide 1 is showing on the screen before class.
7. Whenever noted, slides are available to assist in explanation of task steps. Use slides as needed during class or practical exercise to reinforce training. The instructor may choose to use / not use the LP SLIs as developed, modify the existing SLIs content / order or insert new material as is necessary based on audience analysis to assist in Soldier learning. Changes must be annotated as a pen / ink change on the vault file master LP, VIP LP, and instructor LP. Changes must be approved through Senior Instructor and TDCD 183rd RTI Development Team notified.
8. Whenever necessary, ask leading questions of Soldiers in order to prompt Soldier discussion.
9. Encourage Soldiers to relate their first hand experiences during the activities.
10. Facilitate this lesson using Instructor methodologies.
11. Control group activities using Instructor techniques.

**Proponent Lesson
Plan Approvals**

<u>Name</u>	<u>Rank</u>	<u>Position</u>	<u>Date</u>
Robert Padin	Not available	Approver	08 Mar 2013

SECTION II. INTRODUCTION

Method of Instruction: Lecture
Instr Type(I:S Ratio/Qty): instructor (4:32/0)
Time of Instruction: 10 mins
Instructional Strategy: Large Group Instruction

Motivator

The machine gun is an on time, there when and where you need it, fire support for your infantry squad, platoon, and company. True, you have mortars, and maybe dedicated artillery, and if you are lucky you may have marine attack air assets, but if not, you'll get the Air Force. But in the end, you will have to work with what you have at hand – the machine gun. This instruction will facilitate your ability to effectively engage area and point targets to accomplish your mission.

Terminal Learning Objective

NOTE. Inform the students of the following Terminal Learning Objective requirements.
At the completion of this lesson, you [the student] will:

Action:	Maintain an M240B Machine Gun.
Conditions:	You are a member of a squad or team returning from a mission and have been directed to clean and service the M240 machine gun. You have a cleaning kit with the following items: swabs, pipe cleaners, chamber and bore brushes, cleaning rods, cleaning rags, cleaner lubricant preservative (CLP), rifle bore cleaner (RBC), lubricating oil arctic weather (LAW) (if in cold weather), a M240B scraper and reamer, and a ground cloth. Linked 5.56-mm ammunition and an M122A1 tripod mount assembly may or may not be present.
Standards:	Clear, Disassemble, Clean, Inspects, Lubricate, Assemble, and Perform a Function Check on the M240B machine gun. Clean and inspect the M122A1 tripod and ammunition, if present. Turn in unserviceable weapon, parts, or ammunition.

Safety Requirements

Safety Requirements in a Classroom Setting:

Safety is of the utmost importance in any training environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken during the conduct of training. Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions. Instructor note: The instructor will brief the students on the unit/facility SOP for classroom contingencies i.e. what doors will be used to exit the classroom, rally points, severe weather, WBGT/Kestrel set up, etc.

Safety Requirements other than Classroom Settings:

Safety must be paramount in the complex outdoor environment. During the training process, commanders will utilize the 5-Step Risk Management process to determine the safest and most complete method to train. Every precaution will be taken while replicating realistic battlefield

conditions.

Safety is everyone's responsibility to recognize, mitigate, and report hazardous conditions. Instructor note: The instructor will brief the unit/site SOP and Risk Management Worksheet for all potential contingencies encountered during that training period/event i.e. WBGT/Kestrel set up, trail vehicles for PT/foot marches, severe weather, fire, evacuation routes, muzzle awareness, range safety briefs, required medical FLA with driver and medics with emergency equipment, student injury procedures, and rally points etc.

Risk Assessment Level

Low - All Army Instructors will conduct a Risk Assessment Worksheet (DA Form 7566, CRM Worksheet, Apr 05) prior to training and brief Soldiers on identified hazards and required controls.

Assessment: The operations officer, in cooperation with the principal instructor, will prepare a risk assessment using the before, during, and after checklist and the risk assessment matrixes contained in Risk Management FM 5-19.

Controls: See Attached DA Form 7566.

Leader Actions: See Attached DA Form 7566.

Environmental Considerations

NOTE: Instructor should conduct a Risk Assessment to include Environmental Considerations IAW FM 3-34.5, Environmental Considerations {MCRP 4-11B}, and ensure students are briefed on hazards and control measures.

Users must comply with all local environmental regulations and guidance while conducting training.

Evaluation

Soldiers will be evaluated by task performance measures.

Instructional Lead-in

You, the Infantryman, will be receiving training with the Army's general purpose machine gun the M240B. Today, you will be trained in maintenance procedures and operation of the M240B machine gun.

SECTION III. PRESENTATION

NOTE: Inform the students of the Enabling Learning Objective requirements.

A. ENABLING LEARNING OBJECTIVE

ACTION:	Maintain an M240B Machine Gun
CONDITIONS:	You are a member of a squad or team returning from a mission and have been directed to clean and service the M240 machine gun. You have a cleaning kit with the following items: swabs, pipe cleaners, chamber and bore brushes, cleaning rods, cleaning rags, cleaner lubricant preservative (CLP), rifle bore cleaner (RBC), lubricating oil arctic weather (LAW) (if in cold weather), a M240B scraper and reamer, and a ground cloth. Linked 5.56-mm ammunition and an M122A1 tripod mount assembly may or may not be present.
STANDARDS:	Clear, Disassemble, Clean, Inspects, Lubricate, Assemble, and Perform a Function Check on the M240B machine gun. Clean and inspect the M122A1 tripod and ammunition, if present. Turn in unserviceable weapon, parts, or ammunition.

ELO A - LSA 1. Learning Step / Activity ELO A - LSA 1. Check to ensure the weapon is clear.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 5 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing.

1. Check to ensure the weapon is clear.
 - a. Put safety to "F."
 - b. Pull cocking handle assembly to the rear, locking the bolt to the rear. Return cocking handle to forward position.
 - c. Return the cocking handle forward to the locked position (you should hear a click).
 - d. Push in latches to open cover assembly.
 - e. Remove ammunition belt if present.
 - f. Raise feed tray.
 - g. Inspect the chamber area. Remove any ammunition, ammunition casings, or links.
 - (1) Check feed pawl assembly and feed tray assembly.
 - (2) Lift the feed tray assembly and inspect the chamber.
 - (3) Check the space between the face of the bolt and the chamber.
 - (4) Check the space under the bolt and operating rod assembly.
 - h. Lower feed tray.
 - i. Close cover assembly. Make sure it locks shut.

j. Place safety to "F".

k. Hold cocking handle assembly to rear, depress trigger, and ease bolt forward.

Note: Be sure bolt is forward with safety in "F" (fire position) when gun is not in use.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 2. Learning Step / Activity ELO A - LSA 2. Disassemble the M240B.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 15 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

WARNING

A hot barrel can burn you. If the barrel is hot, use your heat resistant mittens.

NOTE: The following steps do not have to be performed in sequence.

2. Disassemble the M240B.

a. Remove barrel assembly.

(1) Depress backplate latch (A).

(2) Depress barrel locking latch and hold.

(3) Turn barrel carrying handle to upright position.

(4) Push forward and lift barrel out.

b. Remove heat shield assembly from barrel. Lift rear of heat shield assembly from barrel; pry front tabs out of holes on gas hole bushing.

c. Remove trigger-housing assembly.

d. Remove butt stock and buffer assembly. Depress backplate latch and lift butt stock and buffer assembly straight up.

e. Remove driving spring rod assembly.

f. Remove the barrel assembly (Figure 071-025-0001-6).

g. Remove the cover assembly.

h. Remove hand guard.

(1) Extend bipod legs to down and locked position.

WARNING

Using gasoline, kerosene, hydraulic oil, benzene, benzol, high pressure water, steam, or air for cleaning is prohibited.

(2) Pull hand guard straight down and off gas cylinder.

CAUTIONS:

1. Do not use abrasives to clean the bore, piston, gas cylinder, or gas regulator

plug.

2. Do not submerge buffer in any liquid. Wipe with clean wiping rag only.

3. Avoid getting CLP in the gas cylinder when cleaning the bore.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 3. Learning Step / Activity ELO A - LSA 3. Clean the M240B parts, components, and ammunition.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 10 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

3. Clean the M240B parts, components, and ammunition.
 - a. Use cleaning patches, CLP, and bore brush to clean bore.
 - b. Use CLP on receiver brush bristles to clean the receiver.
 - c. Use rags and CLP to remove powder fouling, corrosion, dirt, and rust from all metal components and surfaces.
 - d. Use only a clean rag to clean the cover assembly.
 - e. Clean the gas cylinder.
 - (1) Use a gas cylinder cleaning brush dampened with CLP to clean the gas cylinder bore.
 - (2) Use a combination tool to clean the front interior of the gas cylinder.
 - (a) Insert the combination tool with handle upward into the front end of the gas cylinder of the receiver body. Ensure the tool is fully inserted and seated against the gas cylinder.
 - (b) Apply slight pressure to the handles and turn clockwise to remove carbon.
 - f. Clean the gas regulator using the scraper and reamer.
 - (1) Insert the scraper into the central hole of the gas regulator plug. Remove carbon by twisting the scraper clockwise until it is fully seated against gas regulator plug.
 - (2) Clean regulator plug grooves by inserting the scraper tool into the grooves and turning regulator plug clockwise.
 - (3) Insert the small reamer into each gas inlet hole and twist back and forth to remove carbon (use hand pressure only).
 - (4) Scrape carbon from surface of gas regulator plug using tip of scraper.
 - (5) Insert large reamer through hole in gas port bushing into gas port hole in barrel; remove carbon by twisting reamer back and forth until it enters bore of barrel.
 - g. Clean M122A1 tripod assembly.
 - (1) T&E mechanism. Use a clean, dry wiping rag to remove foreign matter. Use small arms cleaning brush to clean numbers on the scale.
 - (2) Tripod assembly and flex mount. Use a cleaning rag saturated with carbon-

removing compound to clean them with clean wiping rags to wipe all parts dry.

h. Clean ammunition. Use a clean, dry wiping rag to remove foreign matter.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 4. Learning Step / Activity ELO A - LSA 4. Inspect the M240B parts, components, and ammunition.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 15 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

4. Inspect the M240B parts, components, and ammunition.

a. Barrel assembly.

(1) Check barrel for bulges, bends, burrs, or pits in the chamber or bore.

(2) Check to ensure flash suppressor is not loose.

(3) Check front sight for damage and looseness.

(4) Check barrel carrying handle assembly for damaged or missing parts. Move the barrel release slowly to the right and count the clicks. Fewer than two or more than seven clicks indicate defective parts.

(5) Check to ensure heat shield is present, securely attached to barrel, and undamaged.

b. Butt stock and buffer assembly.

(1) Check for burrs and rough edges on the mating grooves and flanges.

(2) Check the backplate latch to ensure it locks the buffer assembly securely.

(3) Check the buffer plug and ensure it sticks out through the backplate and is flush or higher than the protrusion below it.

(4) Check the buffer for rattling sounds by shaking; ensure that the plug cannot rotate by finger pressure.

(5) Check the butt stock for cracks.

c. Driving spring rod assembly.

(1) Check the spring for broken strands.

(2) Check the rod assembly for bends.

d. Bolt and operating rod assembly.

(1) Inspect for bent, broken, cracked or missing parts.

(2) Check for cracks or wear on the tip of the firing pin.

(3) Ensure you cannot move extractor with your fingers.

e. Trigger-housing assembly

(1) Check for broken, missing, or damaged parts.

(2) Inspect the tripping lever and sear for burrs on edges.

(3) Check cocking action by pushing back on the tripping lever (sear will rise). Pull the

trigger (sear will lower).

(4) Check safety. Place on "S" (safe) and pull the trigger. The sear should not drop down far enough to lock in the downward position. Place the safety on "F" (fire) and pull the trigger. The sear should drop down and lock in the downward position.

(a) Placing on "S" (safe) and pulling the trigger (The sear should not drop down far enough to lock in the downward position).

(b) Placing the safety on "F" (fire) and pulling the trigger (The sear should drop down and lock in the downward position).

f. Cover assembly.

(1) Pivot the feed lever back and forth to ensure it operates smoothly without binding.

(2) Push in on the cover latches to make sure the retaining clip is present, secure, and does not bind in the housing.

(3) Push down on the cartridge guides and feed pawls to make sure the springs are present and secure.

(4) Inspect accessory-mounting rail for nicks or burrs.

g. Feed tray. Check for cracks, deformation, broken welds, and loose rivets.

h. Hand guard. Check for cracks, broken, or missing parts.

i. Receiver assembly.

(1) Check that the rear sight is securely mounted and operates properly.

(2) Check that the cocking handle operates properly.

(3) Check for damaged or missing ejection port cover, spring, and pin.

(4) Lower and raise the bipod legs to ensure they move freely without binding.

(5) Check accessory-mounting rail for nicks or burrs that may prevent proper attachment of optional sighting devices.

(6) Check barrel locking latch and cover detent for proper spring tension.

j. Components.

(1) T&E mechanism.

(a) Inspect hand wheels for smooth operation or rust.

(b) Check threads for burrs and rust.

(c) Check traversing slide lock for spring action. Ensure elevating mechanism sleeve fits on traversing bar and clamps firmly.

(d) Check traversing and elevating scales for legibility.

(e) Inspect quick-release pin and chain for burrs and rust. Check for missing spring-loaded balls.

(2) Tripod assembly.

(a) Check for completeness of tripod. Ensure that all nuts and bolts are tightly secured.

(b) Inspect for cracks on the legs and tripod head.

(c) Check for missing, broken, or inoperative lock latch.

(d) Check pintle lock release cam for correct operation.

(e) Check locking action of front leg clamping assembly.

(f) Check that the rear legs lock in the open position. Ensure sleeve latch notch and right leg slide notch engages completely. Ensure latch spring has good tension.

(g) Check telescoping, indexing, and locking action of rear legs and front leg locking assemblies.

(3) Flexible mount assembly.

(a) Check for missing or damaged parts. Check for rust, cracks, and burrs.

(b) Inspect pintle lock assembly for nut, bolt, and cotter pin. Check pintle surface for burrs and rust.

k. Inspect or check ammunition for damage and corrosion. Turn in any unserviceable ammunition.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 5. Learning Step / Activity ELO A - LSA 5. Lubricate M240B parts and components.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 5 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

5. Lubricate M240B parts and components.

Note: Make sure you remove excessive oil from the bore before firing. Under all but the coldest arctic conditions, use only CLP to lubricate the M240B.

a. Generously lube the following parts:

(1) Barrel assembly--on the camming surfaces of the bolt-locking lugs.

(2) Operating rod--on the rollers, camming recess, and those surfaces immediately below the yoke that ride within the receiver rails.

(3) Cover--in the feed cam assembly.

(4) Bolt--on the bolt-locking lugs and actuator cam roller.

b. Lightly lube the following parts:

(1) Driving spring.

(2) Bolt and operating rod assembly moving parts, polished areas, firing pin, and roller.

c. Do not lubricate the following parts:

(1) Butt stock.

(2) Face of bolt.

(3) Piston.

(4) Gas regulator and gas cylinder.

(5) Rear sight.

(6) Composite or rubber components.

d. Lightly lubricate all components and wipe with oily rag to remove excess oil.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 6. Learning Step / Activity ELO A - LSA 6. Assemble the M240B.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 10 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

6. Assemble the M240B.

a. Replace barrel assembly.

(1) Insert gas regulator plug into the gas hole bushing with the number 1 gas setting facing the barrel.

Note: At this setting, the number 1 on the regulator faces the barrel.

(2) Place gas collar over the front end of the gas regulator plug. Rotate collar until it slips onto gas regulator plug. Press in and rotate counterclockwise to lock in place (pull collar to be sure it is in the locked position).

(3) Install heat shield on barrel. Insert the front metal tabs of the heat shield into the holes located on the sides of the gas hole bushing. Push down on the heat shield so that it snaps onto the barrel.

(4) With gas regulator downward and the carrying handle in the vertical position, insert barrel fully into the receiver socket and push barrel carrying handle to the right as far as it will go to lock (fewer than two or more than seven clicks indicate defective parts). Do not force. If barrel binds in socket or if barrel carrying handle will not rotate when pushed, do not pound on barrel carrying handle. Take machine gun to unit maintenance. Figure 071-025-0001-8. Reassemble barrel assembly.

b. Replace cover assembly and feed tray.

c. Replace trigger-housing assembly.

(1) Insert the holding notch on the trigger-housing into the forward recess on the bottom of the receiver.

(2) Lift the trigger-housing up and align holes of trigger-housing with the mounting holes of the receiver.

(3) Hold the trigger-housing in place and insert the spring pin.

d. Replace bolt and operating rod assembly.

(1) Insert the bolt and operating rod assembly into the rear of the receiver. Ensure bolt is on top of receiver rails.

(2) Push the assembly into the receiver as far as possible. Pull the trigger and hold it while pushing the assembly all the way into the receiver.

(3) Close cover assembly.

e. Replace the driving spring rod assembly.

(1) Insert driving rod spring assembly all the way into the receiver.

(2) Push in and lower driving rod spring assembly to seat the retaining stud in the hole on the bottom of the receiver. Figure 071-025-0001-13. Replace drive spring rod assembly.

(4) Pull the trigger to allow the sear to drop and the group to slide all the way into the

receiver.

f. Replace butt stock and buffer assembly.

(1) Position the bottom recess grooves of the butt stock onto the top of the receiver recess grooves.

(2) Slide the butt stock down until it locks on the receiver. Top of buffer should be flush with top of receiver.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 7. Learning Step / Activity ELO A - LSA 7. Perform a function check to ensure the M240B is assembled correctly.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 5 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

7. Perform a function check to ensure the M240B is assembled correctly.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 8. Learning Step / Activity ELO A - LSA 8. Maintain M122A1 Tripod assembly.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 5 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

8. Maintain M122A1 Tripod assembly.

a. Clean M122A1 tripod assembly.

(1) Clean T&E mechanism by using a clean, dry wiping rag to remove foreign matter and using a small arms cleaning brush to clean numbers on the scale.

(2) Clean tripod assembly (with attached flex mount) by using a cleaning rag saturated with carbon-removing compound to clean them, then dry using clean wiping rags.

(b) Check for rust, cracks, and burrs.

(c) Inspect pintle lock assembly for nut, bolt, and cotter pin.

c. Lubricate Tripod assembly

(1) Clean using a clean dry cloth

(2) Wipe off all dirt and foreign matter.

(3) Inspect ammunition prior to use.

(4) Check for damaged links.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

ELO A - LSA 9. Learning Step / Activity ELO A - LSA 9. Maintain ammunition.

Method of Instruction: Conference/Demonstration

Instr Type(I:S Ratio/Qty): instructor(4:32/0)

Time of Instruction: 0 hrs 5 mins

Instructional Strategy: Large Group Instruction

Media Type: Actual Equipment

Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.

9. Maintain ammunition.

Note: Ammunition must also be maintained properly by all Soldiers. The basic care of ammunition is to keep it clean and dry. Turn in any unserviceable ammunition to the chain of command.

a. Maintain Ammunition Boxes

(1) Clean ammunition boxes with a brush or clean dry wiping rag.

(2) Check the ammunition box for damage.

(3) Ensure the box latch will engage the receiver dovetail.

Check on Learning: Conduct a check on learning and correct any student misunderstandings.

Review Summary: Summarize the learning objective.

CHECK ON LEARNING (ELO A): Conduct a check on learning and correct any student misunderstandings.

REVIEW SUMMARY(ELO A): Summarize the learning objective.

SECTION IV. SUMMARY

Method of Instruction:	Conference/Discussion
Instr Type(I:S Ratio/Qty):	instructor(4:32/0)
Time of Instruction:	5 mins
Instructional Strategy:	Large Group Instruction

Check on Learning

Conduct a check on learning and correct any student misunderstandings.

Review/ Summary

Summarize the learning objective.

SECTION V. STUDENT EVALUATION

Testing Requirements

Soldiers will be evaluated by task performance measures.

Feedback Requirements

Feedback is essential to effective learning. Schedule and provide feedback on the assessment and any information to help answer Soldiers' questions about the training exercise.

Appendix A - Viewgraph Masters

**Maintain the M240B Machine Gun
071-SAWE03 / Version 1.0**

Sequence	Media Name	Media Type
None		

Appendix B - Test(s) and Test Solution(s)

Appendix C - Practical Exercises and Solutions

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 071-SAWE03 Version 1.0

PRACTICAL EXERCISE SHEET 071-SAWE03 PE1

Title Maintain the M240B Machine Gun.
Lesson Number/Title 071-SAWE03 Version 1.0 / Maintain the M240B Machine Gun

Security Classification Unclassified

Introduction Tell the Soldier what is expected of him by reviewing the task standards. Stress to the Soldier the importance of observing all cautions, warnings, and dangers to avoid injury to personnel and, if applicable, damage to equipment.

Motivator You must be able to maintain the machine gun.

Enabling Learning Objective **NOTE.** The instructor should inform the students of the following Enabling Learning Objective covered by this practical exercise. (ELO ELO A)
At the completion of this lesson, you [the student] will:

Action:	Maintain an M240B Machine Gun
Conditions:	You are a member of a squad or team returning from a mission and have been directed to clean and service the M240 machine gun. You have a cleaning kit with the following items: swabs, pipe cleaners, chamber and bore brushes, cleaning rods, cleaning rags, cleaner lubricant preservative (CLP), rifle bore cleaner (RBC), lubricating oil arctic weather (LAW) (if in cold weather), a M240B scraper and reamer, and a ground cloth. Linked 5.56-mm ammunition and an M122A1 tripod mount assembly may or may not be present.
Standards:	Clear, Disassemble, Clean, Inspects, Lubricate, Assemble, and Perform a Function Check on the M240B machine gun. Clean and inspect the M122A1 tripod and ammunition, if present. Turn in unserviceable weapon, parts, or ammunition.

Safety Requirements In a training environment, leaders must perform a risk assessment in accordance with FM 5-19, Composite Risk Management. Leaders will complete a DA Form 7566 COMPOSITE RISK MANAGEMENT WORKSHEET during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available and civil considerations, (METT-TC). Note: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.4, NBC Protection, FM 3-11.5, CBRN Decontamination. Everyone is responsible for safety. A thorough risk assessment must be completed prior to every mission or operation.

Risk Assessment Level

None

Environmental Considerations

NOTE: Instructor should conduct a Risk Assessment to include Environmental Considerations IAW FM 3-100.4, Environmental Considerations in Military Operations, Appendix G, and ensure students are briefed on hazards and control measures.

Environmental protection is not just the law but the right thing to do. It is a continual process and starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects.

Evaluation

Grade the Soldiers using the task performance measures.

Retrain Soldiers who do not receive a GO.

Re-test Soldiers until they achieve a GO.

Instructional Lead-in

Tell the Soldier what is expected of him by reviewing the task standards. Stress to the Soldier the importance of observing all cautions, warnings, and dangers to avoid injury to personnel and, if applicable, damage to equipment.

Resource Requirements

Instructor Materials:

See the lesson plan resources.

Student Materials:

See the lesson plan resources.

Special Instructions

Provide the Soldier with the equipment and/or materials described in the conditions statement.

Procedures

Break the students down into 8 man groups, have each group cover down on one machine gun. One Instructor will grade each student individually.

Feedback Requirements

The students will receive timely feedback from the instructors during all practical exercises, hands-on performance evaluations, and written examinations. The student will be counseled (positive and/or negative) based on their performance on evaluations and classroom participation.

**SOLUTION FOR
PRACTICAL EXERCISE 071-SAWE03 PE1**

PERFORMANCE MEASURES

1. Checked to ensure the weapon was clear.
2. Disassembled the M240B.
3. Cleaned the M240B parts, components, and ammunition.
4. Inspected the M240B parts, components, and ammunition.
5. Lubricated M240B parts and components.
6. Assembled the M240B.
7. Performed a function Check on the M240B.
8. **(Optional)** Maintained M122A1 Tripod assembly.
9. **(Optional)** Maintained ammunition.

Appendix D - Student Handouts

**Maintain the M240B Machine Gun
071-SAWE03 / Version 1.0**

Sequence	Media Name	Media Type
None		

Appendix E - TRAINER'S LESSON OUTLINE

Maintain the M240B Machine Gun

071-SAWE03 / Version 1.0

Effective Date: 08 March 2013

1. The importance of this lesson: (Why)

Maintain an M240B Machine Gun.

2. What we want our Soldiers to Achieve: (Outcomes/Standard)

Clear, Disassemble, Clean, Inspects, Lubricate, Assemble, and Perform a Function Check on the M240B machine gun. Clean and inspect the M122A1 tripod and ammunition, if present. Turn in unserviceable weapon, parts, or ammunition.

3. Tasks to be taught

<u>Task Number</u>	<u>Task Title</u>	<u>Task Type</u>
071-025-0001	Maintain an M240B Machine Gun	Individual TAUGHT
071-025-0002	Perform a Function Check on an M240B Machine Gun	Individual REINFORCED
071-025-0006	Zero an M240B Machine Gun	Individual SUPPORTED
071-025-0007	Engage Targets with an M240B Machine Gun	Individual SUPPORTED

Additional Non-Standard Tasks

None

4. References:

<u>Reference Number</u>	<u>Reference Title</u>	<u>Date</u>
FM 3-22.68	Crew-Served Machine Guns, 5.56-MM and 7.62-MM	21 Jul 2006
TM 9-1005-313-10	OPERATORS MANUAL FOR MACHINE GUN, 7.62MM, M240 (NSN 1005-01-025-8095) M240B (1005-01-412-3129) M240C (1005-01-085-4758) M240D (1005-01-418-6995) M240E1 (1005-01-252-4288) M240G (1005-01-359-2714) M240N (15 Nov 2002

Additional Non-Standard References

Unit Markanmanship SOPs.

5. Resources

TIME: Time of Instruction (Time not specified)

LAND: Classroom, Training Area, and Range Requirements

<u>Id</u>	<u>Name</u>
17120-1080-50	GEN INST BLDG, 1080 SF, 50 PN

AMMO: Ammunition Requirements

<u>DODIC</u>	<u>Name</u>
None	

MISC: Materiel Items and TADSS Requirements

<u>Id</u>	<u>Name</u>
* GTA 07-01-044	M240B Machine Gun Disassembly Mat
1005-00-288-3565	SWAB,SMALL ARMS CLEANING
1005-00-350-4100	BRUSH,CLEANING,SMALL ARMS
1005-00-603-4834	ELEVATING AND TRAVERSING MECHANI
1005-01-044-1026	BARREL,MACHINE GUN
1005-01-412-3129	MACHINE GUN,7.62 MILLIMETER
1005-01-433-1617	MOUNT,TRIPOD,MACHINE GUN
1005-01-536-9646	CASE,BARREL,MACHINE GUN
4933-01-033-1503	TOOL,COMBINATION
4933-01-033-1504	SCRAPER,COMBINATION
4933-01-033-1510	EXTRACTOR,RUPTURED CARTRIDGE CAS
4933-01-033-8324	COMBINATION WRENCH W/BRASS HAMMER M240
4933-01-047-3394	REAMERS,CLEANING
5110-01-516-3219	WEAPONS CLEANING KIT, M60
6545-01-254-9551	MES,COMBAT LIFESAVER-1999
6730-00-933-4871	Screen, Projection
6730-01-363-4544	PROJECTOR,MULTIMEDIA
6850-00-224-6657	CLEANING COMPOUND,RIFLE BORE
7010-01-188-8051	COMPUTER SYSTEM,DIGITAL
7520-01-424-4867	EASEL,DISPLAY AND TRAINING
9150-01-079-6124	CLEANER,LUBRICANT AND PRESERVATI
9920-00-292-9946	CLEANER,TOBACCO PIPE

(Note: Asterisk before ID indicates a TADSS.)

Additional Non-Standard Resources

None

6. A possible technique to achieve the outcome:

Maximise hands on training time to allow the students to achieve task mastery.
Grade the Soldiers using the task performance measures.
Retrain Soldiers who do not receive a GO.
Re-test Soldiers until they achieve a GO.

7. Conduct AAR with Soldier and Cadre.

AAR's are essential to ensure the quality of the instruction and the efficiency of the course.
Schedule AAR's with Instructors to solicit feedback on the techniques and procedures in use.
Schedule AAR's with the Student's to solicit feedback on Instructional techniques, information being presented, and efficiency of the course.

NOTE: Before presenting this lesson, Instructors must be thoroughly prepared by studying the appropriate lesson plan and identified reference material.