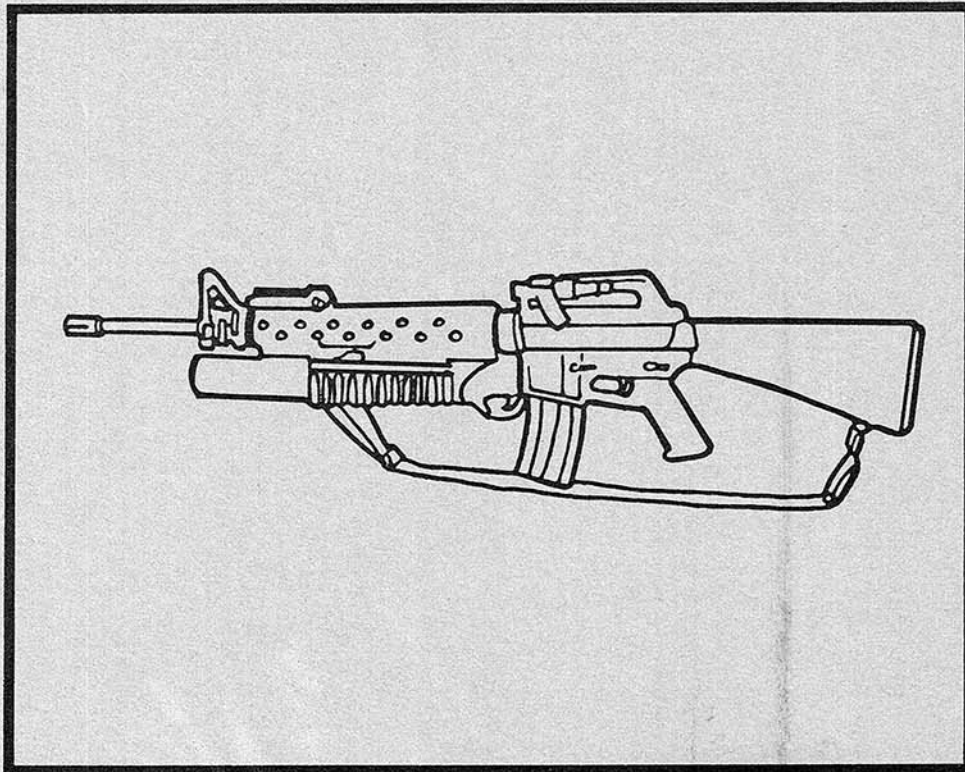


TROUBLESHOOTING THE M203 GRENADE LAUNCHER

TEC LESSON NO. 551-101-8361-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:

- Identify the probable causes of failure of the M203 grenade launcher.
- Perform corrective actions on the M203 grenade launcher.

MATERIAL/EQUIPMENT/PERSONNEL REQUIRED TO COMPLETE THIS LESSON

- Pen or pencil
- Lesson booklet
- M203 grenade launcher attached to an M16A1 rifle
- Armorer tool kit
- Cleaning and lubricating materials and supplies
- GTA No. 10-8-3, M203 Layout Chart
- Troubleshooting Job Aid No. 551-101-8361-J
- TM 9-1010-221-24
- TM 38-750
- One shell casing
- One label for the shell casing
- DA Form 2404
- DA Form 2407

TIME REQUIRED

- Soldier must complete the task within 1 hour.

REFERENCES

- TM 9-1010-221-24
- TM 38-750

STUDENT INSTRUCTIONS

- Before taking this lesson, complete TEC Lesson No. 551-101-8360-A, "Cleaning and Lubricating 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.
551-101-8361-A

Troubleshooting the M203 Grenade Launcher

General Information

This pretest/posttest covers identifying the probable causes of failure of the M16A1 rifle and performing corrective actions. In order to pass the test, the soldier must receive a GO on all performance measures and must complete the task within 1 hour. 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:

M16A1 rifle and M203 grenade launcher with broken barrel assembly
Magazine and dummy round
GTA No. 10-8-3, M203 Layout Chart
Troubleshooting Job Aid 551-101-8361-J

Tools:

Punch, 3/32 pt. dia in., NSN 5120-00-242-3435
Punch, 1/16 pt. dia in., NSN 5120-00-240-6082
Screwdriver, 1/4 in., NSN 5120-00-764-8058
Screwdriver, Phillips No. 1, NSN 5120-00-764-8080

Vise, NSN 5120-00-243-2372

M203 grenade launcher parts:

Steel wire, NSN 9505-00-293-4208
Rivet, tubular, oval-head, NSN 5320-00-055-3066
Machine screw, NSN 5305-00-182-9241
Lock washer, NSN 5310-00-176-6362
Sight leaf: sight assembly, NSN 1010-00-438-7343
Machine screw, NSN 5305-00-182-9265
Handguard, NSN 1010-00-438-7341
Barrel assembly, NSN 1010-00-438-7414
Backplate, NSN 1010-00-438-7307
Follower, NSN 1010-00-497-6989
Special screw, NSN 5305-00-185-8016
Clamp, quadrant sight, NSN 1010-00-483-1156
Post, sight, NSN 1010-00-438-7385

DA Form 2404

DA Form 2407

TM 9-1010-221-24

Pencils

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

Test Instructions:

The M203 grenade launcher on the table will not work. Your task is to clear, hand function, and find out what is wrong with the weapon. After finding the problem, you must take the necessary corrective actions and fill out the necessary forms. All the tools, parts, materials, supplies, and forms you need are also on the table. You will have one hour to complete the test.

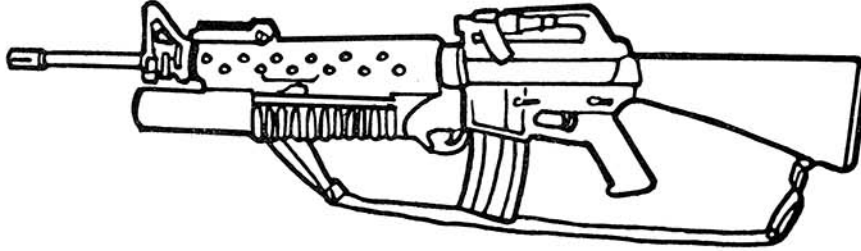
NOTE TO SUPERVISOR/SCORER:

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.

DO NOT WRITE ON THIS TEST.

<u>Performance Measures:</u>	<u>GO</u>	<u>NO GO</u>
1. The soldier clears the weapon.	_____	_____
2. The soldier replaces the broken barrel assembly.	_____	_____
3. The soldier fills out DA Form 2404:		
a. Column C "broken barrel assembly."	_____	_____
b. Column D "replace it."	_____	_____
c. Column E soldier's initials.	_____	_____
4. The soldier completes the test within 1 hour.	_____	_____

TROUBLESHOOTING THE M203 GRENADE LAUNCHER



M16A1 Rifle with the M203
Grenade Launcher Attached

INTRODUCTION:

This is TEC Lesson No. 551-101-8361-A, "Troubleshooting the M203 Grenade Launcher." This lesson will show you how to find out what is wrong with a weapon and how to correct the problem. It will also teach you how to fill out the necessary forms.

EQUIPMENT/MATERIALS REQUIRED:

Items listed in Student/Supervisor Instructions on page i.

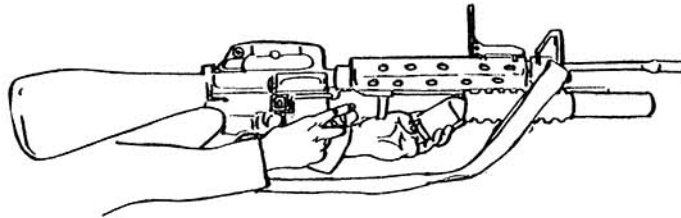
TROUBLESHOOTING THE M203 GRENADE LAUNCHER

In order to keep the M203 grenade launcher operating, you must understand the cycle of functioning on the weapon. The cycle of functioning is the way the parts inside the weapon work together each time a round is fired.

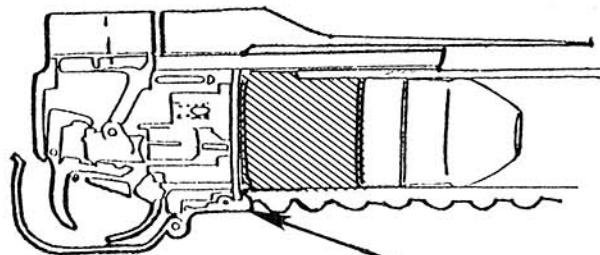
Knowing what happens inside the weapon during the cycle of functioning will help you to identify the causes of malfunctions which may occur.

The cycle of functioning on the M203 grenade launcher is divided into eight stages:

1. **LOADING:** THE BARREL ASSEMBLY IS OPENED AND THE CARTRIDGE IS INSERTED.



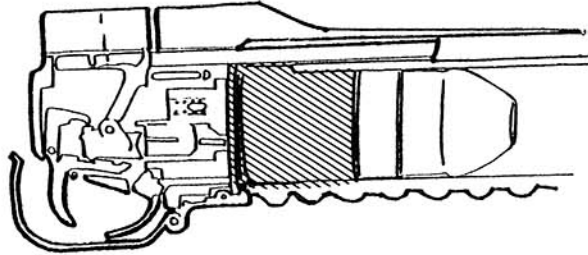
2. **CHAMBERING:** BARREL ASSEMBLY CLOSES AND THE EXTRACTOR HOOKS ONTO THE RIM OF THE CARTRIDGE.



EXTRACTOR

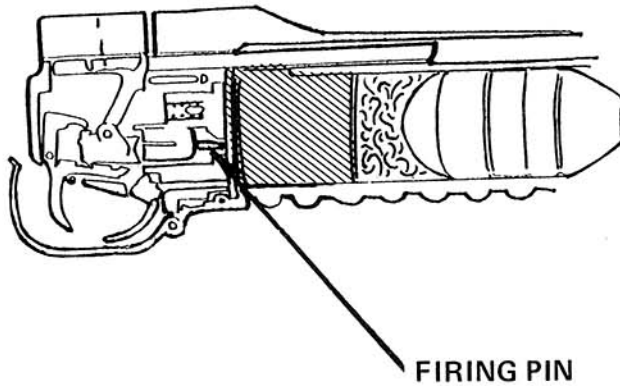
3. LOCKING:

BARREL ASSEMBLY CLOSES AND THE LOCKING LEVER HOOKS ONTO THE BARREL EXTENSION.

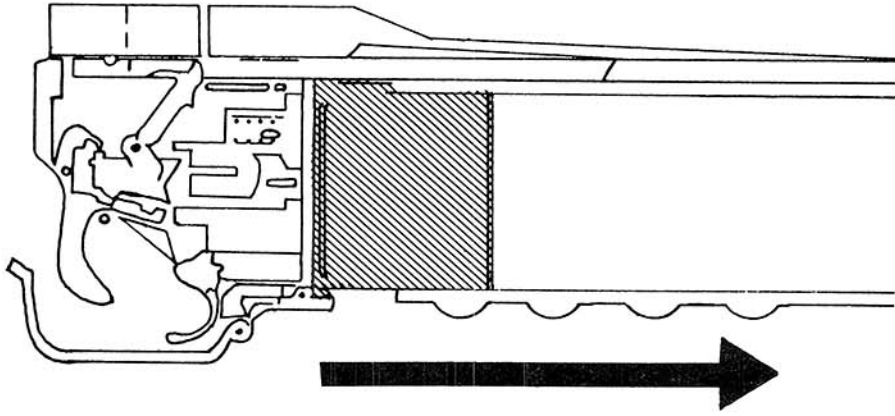


4. FIRING:

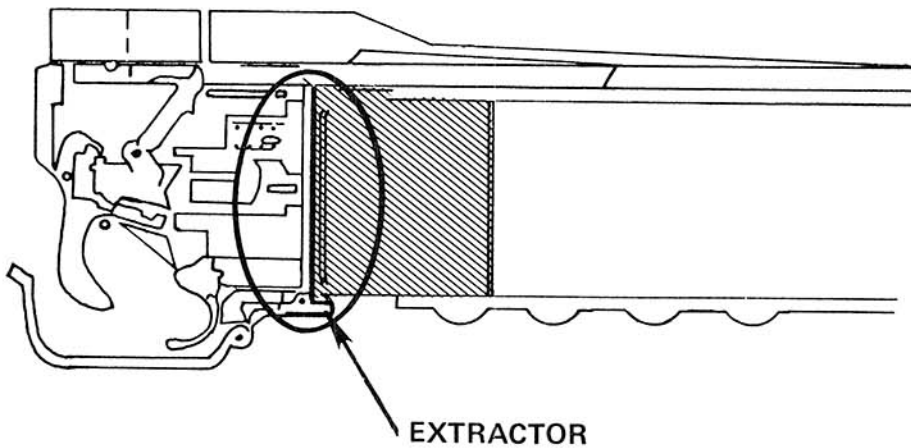
THE FIRING PIN IN THE TRIGGER HOUSING STRIKES THE CARTRIDGE, SETTING IT OFF.



5. UNLOCKING: THE BARREL LATCH IS PRESSED, ALLOWING THE BARREL ASSEMBLY TO SLIDE FORWARD.

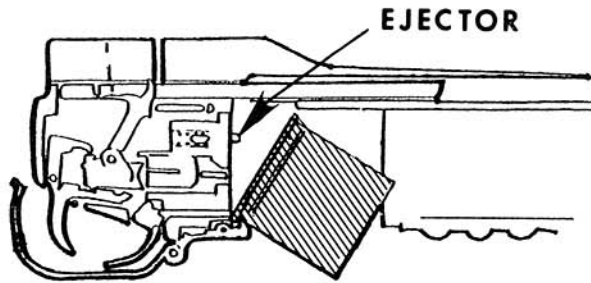


6. EXTRACTING: THE EXTRACTOR HOOKS ONTO THE RIM OF THE CARTRIDGE AND PULLS IT FROM THE CHAMBER.



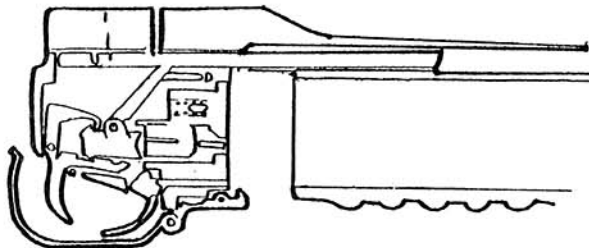
7. EJECTING:

THE EJECTOR PUSHES THE CARTRIDGE CASE FROM THE BARREL ASSEMBLY.



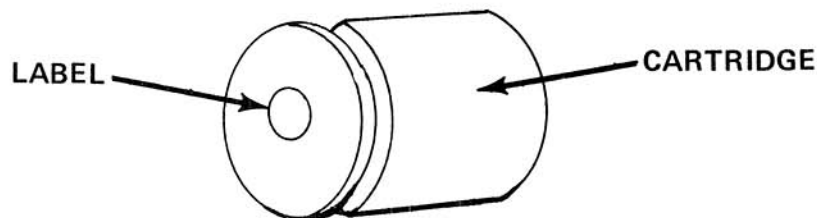
8. COCKING:

THE BARREL ASSEMBLY IS FULLY OPENED AND THEN CLOSED. THE FIRING PIN MOVES FORWARD AND ENGAGES THE TRIGGER SEAR.



HOW TO CHECK THE STEPS IN THE CYCLE OF FUNCTIONING
ON THE M203 GRENADE LAUNCHER

- STEP 1: Clear the weapon.
- STEP 2: Get your one shell casing and put a label in the center on the base.



- STEP 3: Press the barrel latch and move the barrel forward all the way. THIS IS COCKING.
- STEP 4: Put the casing into the breech end of the barrel. THIS IS LOADING.
- STEP 5: Close the barrel. It will lock back. You will hear a click. THIS IS CHAMBERING AND LOCKING.
- STEP 6: Squeeze the trigger. You will hear a click. THIS IS FIRING.
- STEP 7: Press the barrel latch and move the barrel forward. The extractor is hooked onto the round and pulls it from the chamber. THIS IS EXTRACTING.
- STEP 8: Continue to move the barrel forward. The ejector will push the cartridge from the barrel assembly. THIS IS EJECTING.
- STEP 9: Get the casing. Look at the label. It will have a puncture mark on it, caused by the firing pin. This is the second check of the step of firing.
- STEP 10: Clear the weapon.

Now, without looking at the lesson, repeat the function check; then get your pencil and do the self-evaluation on the next page.

SELF-EVALUATION #1

(Check the Steps in the Cycle of Functioning on the M203 Grenade Launcher)

Write the correct answers on a separate sheet of paper.

DO NOT WRITE ON THIS PAGE.

1. What is the first step in the cycle of functioning?
 - a. Locking
 - b. Loading
 - c. Cocking

2. When you squeeze the trigger, what step in the cycle of functioning happens?
 - a. Feeding
 - b. Chambering
 - c. Firing

3. Where should the shell be after the step of chambering?
 - a. In the barrel
 - b. In the ejection port
 - c. Fired

4. Closing the barrel results in what step in the cycle of functioning?
 - a. Firing
 - b. Chambering and locking
 - c. Feeding

5. After the step of loading, how should the barrel be?
 - a. Fully open
 - b. Fully closed
 - c. Half open

The correct answers are on the back of this page.

ANSWERS TO SELF-EVALUATION

1. b, loading
2. c, firing
3. a, in the barrel
4. b, chambering and locking
5. a, fully open

HOW TO USE THE FAILURE SYMPTOMS INDEX

If you receive an M203 grenade launcher that does not work, take these steps:

STEP 1: Find the failure symptom on the index below.

STEP 2: Find the chart number beside that failure symptom.

STEP 3: Locate the proper chart in Job Aid No. 551-101-8361-J.

STEP 4: Follow the procedures on the chart.

INDEX TO FAILURE SYMPTOMS CHARTS

STEPS IN CYCLE OF FUNCTIONING	FAILURE SYMPTOMS	CHART NO.
LOADING	Cartridge will not go into barrel	1
CHAMBERING	Barrel will not pull back	2
LOCKING	Barrel pulls back but will not stay locked back	3
FIRING	No hole in label	4
UNLOCKING	Barrel will not pull forward	5
EXTRACTING	Barrel pulls forward and cartridge stays in chamber	6
EJECTING	Cartridge does not eject	7
COCKING	Can see firing pin with barrel in open position	8
SAFETY CHECKS	Safety will not go on "SAFE" position	9
	Safety will not stay on selected position	10
	Fires with safety on "SAFE" position	10
	Sight leaf will not stay on selected range	11

SELF-EVALUATION #2

(How to Use the Failure Symptoms Index)

Write the correct answer on a separate sheet of paper.

DO NOT WRITE ON THIS PAGE.

1. If you have a weapon with the symptom being that the barrel will not pull back, what chart do you go to?
 - a. 5
 - b. 10
 - c. 2

2. If you have a weapon that fires when the safety is on SAFE, what chart do you go to?
 - a. 10
 - b. 8
 - c. 3

3. If you can see the firing pin when the barrel is in the open position, what chart do you go to?
 - a. 1
 - b. 4
 - c. 8

4. If you have a weapon and the cartridge casing does not eject, which step in the cycle of functioning is failing?
 - a. Extracting
 - b. Ejecting
 - c. Cocking

The correct answers are on the back of this page.

ANSWERS TO SELF-EVALUATION #2

1. c, 2
2. a, 10
3. c, 8
4. b, ejecting

HOW TO ORDER PARTS

Follow these steps and look at the picture on page 15.

- STEP 1. Get out a Request Form. (This form will vary according to your unit SOP.)
- STEP ②. Get TM 9-1010-221-24 and find the illustration that includes the part you are ordering. (Example: Figure C-3.)
- STEP ③. Look at the illustration and find the part you need and its corresponding item number. (In this case, 3)
- STEP ④. Turn to the repair parts list in the TM (for the M203 it is page 38); look down column 10A and find the illustration number. (In this case, C-3)
- STEP ⑤. Look down column 10B and find the item number of the part. (In this case, 3)
- STEP ⑥. Go to column 1 and be sure there is an "O" or "C" next to the part you want to order. This is the maintenance code. "C" means crew or operator level maintenance; "O" means Organizational level maintenance. Whenever there is an "O" or "C", you are authorized to order the part.

The other maintenance codes are:

- "F" for Direct Support Maintenance
- "H" for General Support Maintenance
- "D" for Depot Maintenance

You are NOT authorized to order a part if there is an "F", "H", or "D" in column 1.

- STEP ⑦. Go to column 3 and write down the name of the part on your Request Form.
- STEP ⑧. Go to column 2 and find the Federal Stock Number (FSN) of the part you need. Then convert the FSN to the National Stock Number (NSN) and enter this number on the request form.

To convert from FSN to NSN you must enter two zeros -00- after the first four digits of the FSN.

For example: If the FSN is 1005-550-8694, the
NSN is 1005-00-550-8694.

STEP 9. Remember to keep a copy of the Request Form in the arms room.

STEP 10. Take the Request Form to the PLL clerk. He will order the part for you.

STEP 11. Go back to the arms room. After a few hours, call your PLL clerk. He will give you the document register number for the part you ordered.

The PLL clerk will call you when the part comes in.

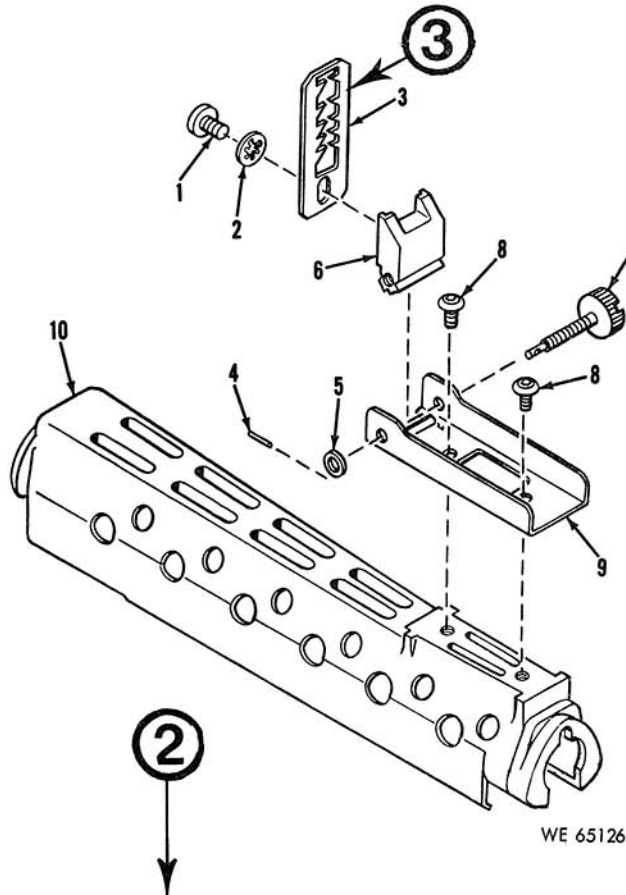


Figure C-3. Handguard and sight assembly group.

Section IV. REPAIR PARTS LIST

(1) SMR Code	(2) Federal Stock Number	(3) Description	(4) Unit of meas	(5) Qty inc. in unit	(6) 30 day DS maint allowance			(7) 30 day GS maint allowance			(8) 1-yr aw per 100 equip cnt- RCY	(9) Depot maint aw per 100 equip	(10) Illustration	
					(a)	(b)	(c)	(a)	(b)	(c)			(a) Figure No.	(b) Item No.
					1-20	21-50	51-100	1-20	21-50	51-100				
P O	5305-182-9241	HANDGUARD AND SIGHT ASSEMBLY GROUP SCREW, MACHINE: S, PAN-HD, SLOT DRIVE, PHOS- FIN. 1/4-28UNF-2A THD, 0.590 O/A LG 8448331 (19204)	EA	1	*	*	*	*	*	*	*	*	C-3	1
C P O	5310-176-6362	WASHER, LOCK: S, BLK OXIDE COATING, 0.267 ID, 0.478 OD, 0.028 THK (SIGHT LEAF ASSY) 8448328 (19204)	EA	1	*	*	*	*	*	*	*	*	C-3	2
C P O	1010-438-7343	LEAF, SIGHT: SIGHT ASSEMBLY, FRONT FOLDING 8448322 (19204)	EA	1	*	*	*	*	*	*	*	*	C-3	3
C P F	5315-181-6465	PIN, SPRING: TUBULAR, COILED, HEAVY DUTY, CD-PLD, 5/64 DIA, 3/8 LG MS 39086-17 (96906)	EA	1	*	*	*	*	*	*	*	*	C-3	4
C P F	5310-436-7144	WASHER, FLAT: AN 960XC6 (88044)	MX	1	*	*	*	*	*	*	*	*	C-3	5

SELF-EVALUATION #3

(How to Order Parts)

You are ordering a sight leaf. On a separate sheet of paper, write your answers to the questions below. Use page 15 as a reference.

1. What is the item number of this part?

2. Why is there an "0" in column 1 next to the sight leaf?

3. What is the National Stock Number of a sight leaf?

4. What form do you use when ordering parts?

5. What information do you put on this form?

6. Who do you take this form to?

ANSWERS TO SELF-EVALUATION #3

1. 3
2. It means you can replace the part
3. 1010-00-438-7343
4. Request Form
5. The name of the part and its National Stock Number
6. Your PLL clerk

PROCEDURES FOR FILLING OUT DA FORM 2404

INTRODUCTION

DA Form 2404 is an Equipment Inspection and Maintenance Worksheet.

This section explains:

1. When to Fill Out DA Form 2404
2. What to Do With DA Form 2404
3. How to Fill Out DA Form 2404

When to Fill Out DA Form 2404

The first time you perform a technical inspection or preventive maintenance inspection on a weapon, you must fill out blocks 1-9 of a DA Form 2404 for that weapon. Fill out columns a-e each time a fault is found on that weapon.

What to Do With DA Form 2404

After you fill out the form, put it in your arms room files. Remember that you must keep this form up-to-date. Each time you perform a technical inspection or preventive maintenance inspection on the weapon, you must record all faults found and corrective actions taken on this form. If you must send a weapon to Direct Support, you must fill out DA Form 2404 (and DA Form 2407) and take the weapon and both of these forms to Direct Support.

How to Fill Out DA Form 2404

Instructions for completing DA Form 2404 are found on the form itself, as well as in TM 38-750, The Army Maintenance Management Systems (TAMMS).

HOW TO FILL OUT DA FORM 2404

Block 1: Fill in the name of your unit.

Example:

1. ORGANIZATION L. Co. 2 ^D BN QMS BDE.
--

Block 2: Fill in the name of the weapon and its model number.

Example:

2. NOMENCLATURE AND MODEL GRENADE LAUNCHER M203
--

Block 3: Fill in the serial number of the weapon.

Example:

3. REGISTRATION/SERIAL/FSN 20201

Block 4a- Put a slash (/) in each block not used.
4d:

Example:

4a. MILES /	b. HOURS /	c. ROUNDS FIRED /	d. HOT STARTS /
-------------	------------	-------------------	-----------------

Block 5: Fill in the date (the first time you fill out this form).

Example:

5. DATE AUG 8, 1978

Block 6: Fill in the type of inspection your are performing, either a technical inspection (TI) or preventive maintenance inspection (PM).

Example:

6. TYPE INSPECTION PM

Block 7: Fill in the TM number and date for the weapon. The TM number is found on the cover of the TM in the upper right hand corner. The TM date is found on the cover of the TM at the bottom.

Example:

7.	
TM NUMBER 9-1010-221-24	TM DATE MAR 1972

Block 8a: Sign your name:

Example:

8a. SIGNATURE (Person(s) performing inspection) John Gaus
--

Block 9a: Get your maintenance supervisor to sign his name (only when required by Unit SOP).

Example:

9a. SIGNATURE (Maintenance Supervisor) Peter Wiley

Column a: For each uncorrected problem, fill in the appropriate TM sequence number from the PMS (Preventive Maintenance Service) table of the weapon TM.

Column b: For each uncorrected problem, fill in one of the following status symbols:

Put an X if the weapon is inoperable.

Put a / if the weapon is broken and must be fixed to increase its efficiency.

Put your initials if you find nothing wrong with the weapon.

Column c: List each thing that is wrong with the weapon.

Column d: Fill in the action you took to correct each problem listed.

Column e: Put your initials here when you have corrected the problem.

Example:

TM ITEM NO. a	STATUS b	DEFICIENCIES AND SHORTCOMINGS c	CORRECTIVE ACTION d	INITIAL WHEN CORRECTED e
		BROKEN HANDGUARD	REPLACED IT	JLS
7	X	BROKEN EXTRACTOR	DA FORM 2407 (SPT)	JJS

SELF-EVALUATION #4

(Filling Out DA Form 2404)

You are doing a preventive maintenance inspection of the M203 grenade launcher. You have found that it has a broken trigger, a broken sight leaf, and a dirty bore.

On a blank DA Form 2404, fill in the necessary information. When you finish, check your form with the form on the next page.

THIS IS HOW YOUR DA FORM 2404 SHOULD LOOK

1. ORGANIZATION		2. NOMENCLATURE AND MODEL		3. REGISTRATION/SERIAL/FIN		4. MILES		5. HOURS		6. ROUNDS		7. FIRED		8. HOT STAYS		9. DATE		10. TYPE INSPECTION	
YOUR ORGANIZATION		GRENADE LAUNCHER M203																PM	
7. TM NUMBER		7. TM DATE		7. TM NUMBER		7. TM DATE		7. TM NUMBER		7. TM DATE		7. TM NUMBER		7. TM DATE		7. TM NUMBER		7. TM DATE	
9-1010-221-24		MAR 1972																	
INSTRUCTIONS - Perform each check listed in the TM applicable to the inspection performed. Following the sequence listed in pertinent TM, complete form as follows:																			
COLUMN a - Enter TM item number.																			
COLUMN b - Enter the applicable condition status symbol.																			
COLUMN c - Enter deficiencies and shortcomings.																			
COLUMN d - Show corrective action for deficiency or shortcoming listed in Column c.																			
COLUMN e - Individual ascertaining completed corrective action initial in this column.																			
ALL INSPECTIONS AND EQUIPMENT CONDITIONS RECORDED ON THIS FORM HAVE BEEN DETERMINED IN ACCORDANCE WITH DIAGNOSTIC PROCEDURES AND STANDARDS IN THE TM CITED HEREON.																			
a. SIGNATURE (Person performing inspection) b. TIME																			
c. SIGNATURE (Maintenance Supervisor) d. TIME																			
e. MANNOUR REQUIRED																			
TM ITEM NO.		TM STATUS		DEFICIENCIES AND SHORTCOMINGS		CORRECTIVE ACTION		INITIAL WHEN CORRECTED		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL	
8		X		BROKEN TRIGGER		DA FORM 2407 (SPT)		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL	
				BROKEN SIGHT LEAF		REPLACED IT		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL	
				DIRTY BORE		CLEANED IT		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL		INITIAL	

PROCEDURES FOR FILLING OUT DA FORM 2407

INTRODUCTION

DA Form 2407 is for a Maintenance Request. This section of the lesson explains:

1. When to Fill Out DA Form 2407
2. What to Do With DA Form 2407
3. How to Fill Out DA Form 2407

When to Fill Out DA Form 2407

Any time you must send a weapon to Direct Support, you must fill out DA Form 2407.

What to Do With DA Form 2407

After you fill out the form, you must attach the DA Form 2404 (for the weapon that needs support maintenance) to it. Then take the two DA Forms (2404 and 2407) and the malfunctioning weapon to Direct Support. You will leave the weapon at Direct Support and you will be given the #1 copy of DA Form 2407 as a receipt for the weapon.

How to Fill Out DA Form 2407

Instructions for completing DA Form 2407 are found on the form itself as well as in TM 38-750, The Army Maintenance Management Systems (TAMMS).

MAINTENANCE REQUEST <small>For use of this form, see TM 38-750; the proponent agency is DCSLOG.</small>	PAGE NO.	NO. OF PAGES	REQUIREMENT CONTROL SYMBOL <small>CSGLD-1047(R1)</small>
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SECTION I - EQUIPMENT DATA

CONTROL NUMBER 185579	WORK ORDER NUMBER	WESDC	ORG PD	PD AUTHENTICATION
<input type="checkbox"/> WORK REQUEST <input type="checkbox"/> MWO <input type="checkbox"/> WARRANTY CLAIM	1a. ORGANIZATION	b. LOCATION		c. UNIT IDENT CODE

2. SERIAL NO.	3. NOUN NOMENCLATURE	4. LINE NO.	5. MODEL	6. NATIONAL STOCK NUMBER
---------------	----------------------	-------------	----------	--------------------------

7. MAINTENANCE ACTIVITY	a. LEVEL	8. UTILIZATION CODE	9. MCSR ITEM	a. ERC	b. PACING ITEM	10. HOURS	11. MILES	12. ROUNDS	13. STARTS
-------------------------	----------	---------------------	--------------	--------	----------------	-----------	-----------	------------	------------

14. FAILURE DETECTED DURING (Select one - use \checkmark or X)					15. FIRST INDICATION OF TROUBLE (Select one - use \checkmark or X)				
<input type="checkbox"/> A Scheduled Maintenance	<input type="checkbox"/> C Test	<input type="checkbox"/> E Storage	<input type="checkbox"/> G Flight	<input type="checkbox"/> 068 Inoperative	<input type="checkbox"/> 258 Overheating	<input type="checkbox"/> 790 Out of Adjustment			
<input type="checkbox"/> B Handling	<input type="checkbox"/> D Normal Op	<input type="checkbox"/> F Inspection	<input type="checkbox"/> H Other	<input type="checkbox"/> 008 Noisy	<input type="checkbox"/> 387 Low Performance	<input type="checkbox"/> Other			

16. DESCRIBE DEFICIENCIES OR SYMPTOMS ON THE BASIS OF COMPLETE CHECKOUT AND DIAGNOSTIC PROCEDURE IN EQUIPMENT TM (Do not prescribe repairs)

16a. REMARKS

PREPARATION INSTRUCTIONS

(Prior to using this form, read TM 38-750 for detailed preparation instructions)

- | | |
|---|---|
| <p>(1) Place a "✓" or an "X" in the box for the type action required.</p> <p>(2) Enter the WESDC if the item is Materiel Condition Status Reportable.</p> <p>(3) Enter the priority designator as determined from the urgency of need and force activity designator.</p> <p>(4) The Unit Commander, Chief of TDA activity or their designated representative will authenticate, by signature, a priority of 01 through 08.</p> <p>(5) Block 1a. Enter the name of the organization submitting the request.</p> <p>(6) Block 1b. Enter the unit submitting the request; units overseas enter APO only.</p> <p>(7) Block 1c. Enter the unit identification code of the unit in block 1a.</p> <p>(8) Block 2. Enter the equipment serial no. For ammunition, enter the lot number. For administrative use vehicles enter the USA registration number.</p> <p>(9) Block 3. Enter the noun abbreviation of the item.</p> <p>(10) Block 4. Enter the item line number if applicable.</p> <p>(11) Block 5. Enter the model number.</p> <p>(12) Block 6. Enter the national stock number of the item listed in block 3.</p> | <p>(13) Block 7. Enter the name of the support activity.</p> <p>(14) Block 7a. Enter the symbol of the maintenance category (O, F, H, D or L)</p> <p>(15) Block 8. Enter the utilization code.</p> <p>(16) Block 9. Enter the word "yes" if the item is Materiel Condition Status Reportable.</p> <p>(17) Block 9a. Enter the equipment readiness code, if applicable.</p> <p>(18) Block 9b. Enter the word "yes" if the item is a pacing item.</p> <p>(19) Block 10. Enter the hour reading if applicable</p> <p>(20) Block 11. Enter the mileage from the odometer if applicable.</p> <p>(21) Block 12. Enter the total rounds fired if applicable.</p> <p>(22) Block 13. For turbine engines, enter the number of hot starts.</p> <p>(23) Block 14. Enter a "✓" or "X" in the proper block.</p> <p>(24) Block 15. Enter a "✓" or "X" in the proper block.</p> <p>(25) Block 16. Describe briefly the fault or symptoms needing correction.</p> |
|---|---|

THIS IS HOW DA FORM 2407 LOOKS

23. SUBMITTED BY	24. RECEIVED BY
JULIAN DATE	JULIAN DATE

HOW TO FILL OUT DA FORM 2407

SECTION 1:

- (1) Place a "✓" or an "X" in the box for the type action required.
- (2) Enter the WESDC if the item is Materiel Condition Status Reportable.
- (3) Enter the priority designator as determined from the urgency of need and force activity designator.
- (4) The Unit Commander, Chief of TDA activity of their designated representative will authenticate, by signature, a priority of 01 through 08. *10*

Example:

SECTION 1 - EQUIPMENT DATA				
WORK ORDER NUMBER	WESDC	ORG PD	PD AUTHENTICATION	
		<i>05</i>	<i>YOUR CO</i>	
<input checked="" type="checkbox"/> WORK REQUEST <input type="checkbox"/> MWO <input type="checkbox"/> WARRANTY CLAIM				

Block 1a: Fill in the name of your organization.

Block 1b: Fill in the location of your unit.

Block 1c: Fill in your unit identification code.

Example:

1a. ORGANIZATION <i>L. Co. 2^D BN. QMS. BDE.</i>	1b. LOCATION <i>FORT LEE, VA</i>	1c. UNIT IDEN CODE <i>WA97Z</i>
---	-------------------------------------	------------------------------------

Block 2: Fill in the serial number of the weapon.

Example:

2. SERIAL NUMBER <i>913388</i>

Block 3: Fill in the name of the weapon.

Example:

3. NOUN NOMENCLATURE <i>GRENADE LAUNCHER</i>

Block 4: Put a /.

Example:

4. LINE NUMBER
/

Block 5: Fill in the model number of the weapon.

Example:

5. MODEL
M203

Block 6: Fill in the National Stock Number of the weapon.

Example:

6. NATIONAL STOCK NUMBER
1010-00-179-6447

- Block 7: (1) Block 7. Enter the name of the support activity.
(2) Block 7a. Enter the symbol of the maintenance category (O, F, H, D or L).

Example:

7. MAINTENANCE ACTIVITY	8. LEVEL
YOUR MAINT CO (DS)	F

Block 8: Put "ON" in the box.

Example.

8. UTILIZATION CODE*
ON

- Block 9: (1) Block 9. Enter the word "yes" if the item is Materiel Condition Status Reportable.
(2) Block 9a. Enter the equipment readiness code, if applicable.
(3) Block 9b. Enter the word "yes" if the item is a pacing item.

Example:

9. MCSR ITEM	9. EPC	9. PACING ITEM
	C	NO

Blocks 10-

13: Put a slash (/) in each block.

Example:

10. HOURS	11. MILES	12. ROUNDS	13. STARTS
/	/	/	/

Block 14: Put an X in the box that shows when the failure was noticed.

Example:

14. FAILURE DETECTED DURING (Select one - use ✓ or X)			
<input type="checkbox"/> A SCHEDULED MAINTENANCE	<input type="checkbox"/> C TEST	<input type="checkbox"/> E STORAGE	<input type="checkbox"/> G FLIGHT
<input type="checkbox"/> B HANDLING	<input type="checkbox"/> D NORMAL OPERATION	<input type="checkbox"/> F INSPECTION	<input checked="" type="checkbox"/> H OTHER

Block 15: Put an X in the box that shows the condition of the weapon when the failure was first noticed.

Example:

15. FIRST INDICATION OF TROUBLE (Select one - use ✓ or X)			
<input type="checkbox"/> 066 INOPERATIVE	<input type="checkbox"/> 258 OVERHEATING	<input type="checkbox"/> 790 OUT OF ADJUSTMENT	
<input type="checkbox"/> 1008 NOISY	<input type="checkbox"/> 1387 LOW PERFORMANCE	<input checked="" type="checkbox"/> OTHER	

Block 16: Fill in what is wrong with the weapon.

Example:

16. DESCRIBE DEFICIENCIES OR SYMPTOMS ON THE BASIS OF COMPLETE CHECKOUT AND DIAGNOSTIC PROCEDURE IN EQUIPMENT TM (Do not prescribe repairs)
BROKEN FIRING PIN

Block 23: Fill in your initials and the Julian Date. If you don't remember how to get the Julian Date, go back to TEC Lesson No. 551-101-8457-A.

Example:

23. SUBMITTED BY
JH
JULIAN DATE
8121

SELF-EVALUATION #5

(Filling Out DA Form 2407)

You are doing a preventive maintenance inspection of M203 grenade launcher. You have found that it has a broken trigger.

On a blank DA Form 2407, fill in the necessary information. When you finish, check your form with the form on the next page.

THIS IS HOW YOUR
DA FORM 2407
SHOULD LOOK

23. SUBMITTED BY	YOUR INITIALS
DATE	JULIAN DATE

- (1) Place a "✓" or an "X" in the box for the type action required.
- (2) Enter the WESDC if the item is Materiel Condition Status Reportable.
- (3) Enter the priority designator as determined from the urgency of need and force activity designator.
- (4) The Unit Commander, Chief of TDA activity or their designated representative will authenticate, by signature, a priority of 01 through 08.
- (5) Block 1a. Enter the name of the organization submitting the request.
- (6) Block 1b. Enter the unit submitting the request; units overseas enter APO only.
- (7) Block 1c. Enter the unit identification code of the unit in block 1a.
- (8) Block 2. Enter the equipment serial no. For ammunition, enter the lot number. For administrative use vehicles enter the USA registration number.
- (9) Block 3. Enter the noun abbreviation of the item.
- (10) Block 4. Enter the item line number if applicable.
- (11) Block 5. Enter the model number.
- (12) Block 6. Enter the national stock number of the item listed in block 3.
- (13) Block 7. Enter the name of the support activity.
- (14) Block 7a. Enter the symbol of the maintenance category (O, F, H, D or L).
- (15) Block 8. Enter the utilization code.
- (16) Block 9. Enter the word "yes" if the item is Materiel Condition Status Reportable.
- (17) Block 9a. Enter the equipment readiness code, if applicable.
- (18) Block 9b. Enter the word "yes" if the item is a pacing item.
- (19) Block 10. Enter the hour reading if applicable.
- (20) Block 11. Enter the mileage from the odometer if applicable.
- (21) Block 12. Enter the total rounds fired if applicable.
- (22) Block 13. For turbine engines, enter the number of hot starts.
- (23) Block 14. Enter a "✓" or "X" in the proper block.
- (24) Block 15. Enter a "✓" or "X" in the proper block.
- (25) Block 16. Describe briefly the fault or symptoms needing correction.

(Prior to using this form, read TM 38 750 for detailed preparation instructions)

PREPARATION INSTRUCTIONS

16d. REMARKS																																			
BROKEN TRIGGER																																			
18. DESCRIBE DEFICIENCIES OR SYMPTOMS ON THE BASIS OF COMPLETE CHECKOUT AND DIAGNOSTIC PROCEDURE IN EQUIPMENT TM (Do not prescribe repairs)																																			
<table border="0" style="width: 100%;"> <tr> <td><input type="checkbox"/> Handling</td> <td><input type="checkbox"/> Normal Op</td> <td><input type="checkbox"/> Inspection</td> <td><input checked="" type="checkbox"/> Other</td> <td><input type="checkbox"/> Flight</td> <td><input type="checkbox"/> Storage</td> <td><input type="checkbox"/> Test</td> <td><input type="checkbox"/> Maintenance</td> <td><input type="checkbox"/> Shutdown</td> <td colspan="3"></td> </tr> <tr> <td><input type="checkbox"/> 008</td> <td><input type="checkbox"/> 009</td> <td><input type="checkbox"/> 010</td> <td><input type="checkbox"/> 011</td> <td><input type="checkbox"/> 012</td> <td><input type="checkbox"/> 013</td> <td><input type="checkbox"/> 014</td> <td><input type="checkbox"/> 015</td> <td><input type="checkbox"/> 016</td> <td colspan="3"></td> </tr> </table>												<input type="checkbox"/> Handling	<input type="checkbox"/> Normal Op	<input type="checkbox"/> Inspection	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Flight	<input type="checkbox"/> Storage	<input type="checkbox"/> Test	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Shutdown				<input type="checkbox"/> 008	<input type="checkbox"/> 009	<input type="checkbox"/> 010	<input type="checkbox"/> 011	<input type="checkbox"/> 012	<input type="checkbox"/> 013	<input type="checkbox"/> 014	<input type="checkbox"/> 015	<input type="checkbox"/> 016			
<input type="checkbox"/> Handling	<input type="checkbox"/> Normal Op	<input type="checkbox"/> Inspection	<input checked="" type="checkbox"/> Other	<input type="checkbox"/> Flight	<input type="checkbox"/> Storage	<input type="checkbox"/> Test	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Shutdown																											
<input type="checkbox"/> 008	<input type="checkbox"/> 009	<input type="checkbox"/> 010	<input type="checkbox"/> 011	<input type="checkbox"/> 012	<input type="checkbox"/> 013	<input type="checkbox"/> 014	<input type="checkbox"/> 015	<input type="checkbox"/> 016																											
14. FAILURE DETECTED DURING (Select one - use ✓ or X)																																			
7. MAINTENANCE ACTIVITY			8. LEVEL			9. MCSR			10. UTILIZATION CODE																										
Your Maint Co (DS)			F			DX			C																										
2. SERIAL NO.																																			
185579																																			
10. ORGANIZATION																																			
YOUR ORGANIZATION																																			
6. LOCATION																																			
FORT LEE, VA																																			
5. MODEL																																			
M203																																			
6. NATIONAL STOCK NUMBER																																			
1010-00-179-6447																																			
11. MILES																																			
/																																			
12. ROUNDS																																			
/																																			
13. STARTS																																			
/																																			
15. FIRST INDICATION OF TROUBLE (Select one - use ✓ or X)																																			
258			259			260			261																										
Overheating			Inoperative			Noisy			Low Performance																										
<input type="checkbox"/>			<input type="checkbox"/>			<input type="checkbox"/>			<input checked="" type="checkbox"/>																										
1790																																			
Out of Adjustment																																			
Other																																			
SECTION I - EQUIPMENT DATA																																			
FOR USE OF THIS FORM, SEE TM 38 750. THE PROPONENT AGENCY IS DCSLOG.																																			
PAGE NO.																																			
NO. OF PAGES																																			
REQUIREMENT CONTROL SYMBOL																																			
CSGLD-1047(R11)																																			

PRACTICE EXERCISE

Use the M203 grenade launcher in front of you and follow the steps in this practice exercise. Write your answers to the questions on a separate sheet of paper.

DO NOT WRITE ON THIS PAGE.

PRACTICE EXERCISE #1

STEP 1. Clear the M203

STEP 2. Open the barrel 1/2 inch and remove backplate and follower.

STEP 3. Reassemble the weapon but LEAVE OUT the follower.

STEP 4. Hand function the weapon.

1. What is the failure symptom?

2. What step in the cycle of functioning is failing?

3. To what chart do you go?

4. What parts can you replace?

5. What form do you fill out if you must replace a part?

STEP 5. Disassemble and put the follower back in.

STEP 6. Hand function the weapon.

STEP 7. Clear the weapon.

ANSWERS TO PRACTICE EXERCISE

PRACTICE EXERCISE #1

1. Barrel will pull back but will not lock

2. Chambering and locking.

3. 3

4. Follower and barrel assembly

5. DA Form 2404

SELF-EVALUATION #6

Write the correct answers on a separate sheet of paper.

DO NOT WRITE ON THESE PAGES.

1. When do you fill in DA Form 2404?
 - a. Only if you send a weapon to Direct Support
 - b. Only if you replace a part
 - c. Any time you perform corrective action on a weapon
2. When do you fill out DA Form 2407?
 - a. Any time you clean a weapon
 - b. Any time you order new parts
 - c. When you send a weapon to Direct Support
3. Which of the following parts can you replace on the M203?
 - a. Handguard
 - b. Barrel extension
 - c. Sight leaf
4. Most of the reasons for malfunctioning weapons are caused by:
 - a. Broken parts
 - b. Dirt or improper lubrication
 - c. Improper handling by the operator
5. When you replace a part, be sure to use a part that is:
 - a. Broken
 - b. In your arms room
 - c. Known to be good
6. If you replace a part that is broken, you should:
 - a. Order a new part
 - b. Turn in the bad part
 - c. Fill out DA Form 2404
 - d. All of the above

7. Which of these parts can you order? (More than one answer.)
- Locking bar
 - Swivel mount
 - Lock washer
 - Sight leaf base screws
8. You are brought a weapon that will not function. It is clean and lubricated. None of the parts which you can replace are broken or missing. It is assembled correctly. The weapon will not function. What do you do?
- Clear it
 - Fill out DA Form 2407
 - Send the weapon to Direct Support
 - All of the above
9. If you are troubleshooting the M203 and find a broken extractor, what do you do?
- Repair the extractor
 - Send the weapon to Direct Support
 - Order a new extractor
10. The first thing you ALWAYS do when troubleshooting a weapon is:
- Clear it
 - Disassemble it
 - Clean it
11. After you finish working on a weapon, and before you put it on the weapons rack, you should:
- Clear it and do the safety checks
 - Hand function the weapon
 - Fill out DA Form 2406
12. If you have a launcher and the cartridge can not be inserted into the barrel, what part can you replace?
- The barrel extractor
 - The mainspring
 - The barrel assembly

The correct answers to the self-evaluation are on the next page.

WHEN YOU HAVE COMPLETED YOUR PRACTICE EXERCISES
AND THE SELF-EVALUATIONS FOR THIS LESSON, ASK YOUR
SUPERVISOR TO GIVE YOU THE POSTTEST.

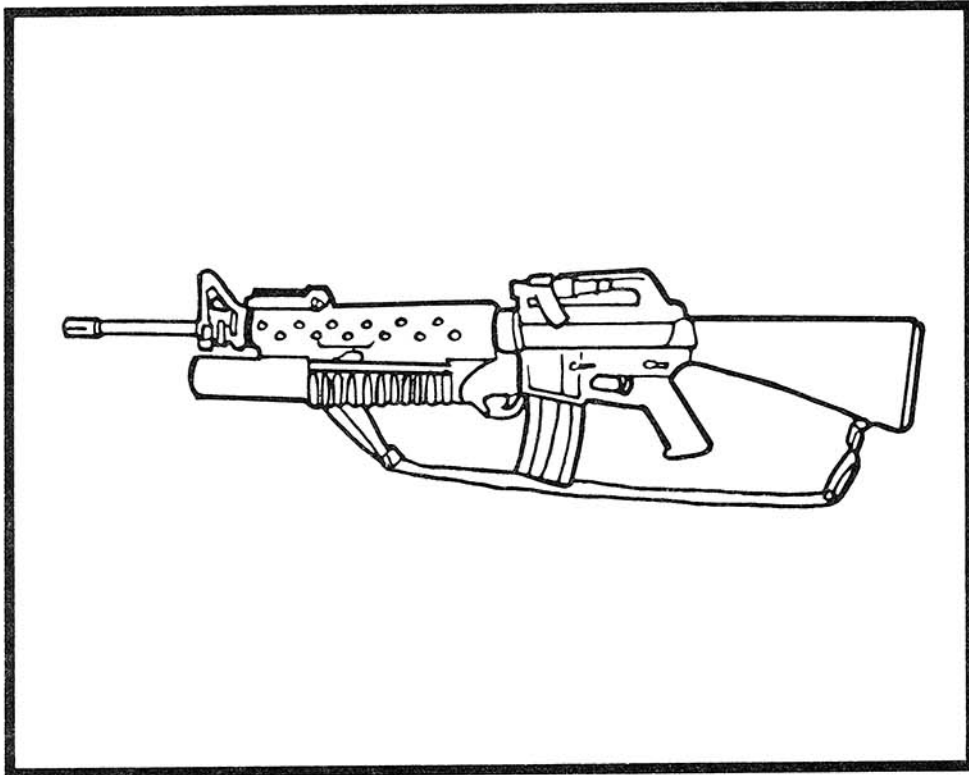
1. c, any time you perform corrective action on a weapon
2. c, when you send a weapon to Direct Support
3. a, handguard
c, sight leaf
4. b, dirt or improper lubrication
c, know to be good
5. d, all of the above
6. c, lock washer
d, sight leaf base screws
7. d, all of the above
8. b, send the weapon to Direct Support
9. a, clear it
10. b, hand function the weapon
11. c, the barrel assembly
- 12.

ANSWERS TO SELF-EVALUATION #6

JOB AID

TROUBLESHOOTING THE M203 GRENADE LAUNCHER

JOB AID NO. 551-101-8361-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. 551-101-8361-J, "Troubleshooting the M203 Grenade Launcher." This job aid tells you how to check a malfunctioning weapon and how to isolate failure causes.

You must have this job aid to do the TEC Lesson No. 551-101-8361-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.

TROUBLESHOOTING THE M203 GRENADE LAUNCHER

HOW TO CHECK A MALFUNCTIONING WEAPON

CLEAR THE WEAPON

HAND FUNCTION WITH SHELL CASING

DISASSEMBLE WEAPON

CHECK FOR BROKEN OR MISSING PARTS
If any of these parts are broken/missing, replace them:

- Handguard
- Lock washer
- Sight leaf
- Sight leaf base screws
- Barrel assembly
- Back plate
- Follower
- Quadrant sight group
- Quadrant sight clamp
- Sight post
- Tubular Rivet

REASSEMBLE THE WEAPON

HAND FUNCTION

If weapon works:
Clear it and fill out
DA Form 2404

If weapon is still broken:
Clear it, fill out DA Forms
2404 and 2407 and send weapon
to Direct Support.

HOW TO USE THE FAILURE SYMPTOMS INDEX

If you receive an M203 grenade launcher that does not work, take these steps:

- STEP 1: Find the failure symptom on the index.
- STEP 2: Find the chart number beside that failure symptom.
- STEP 3: Locate the proper chart on the following pages.
- STEP 4: Follow the procedures on the chart.

INDEX TO FAILURE SYMPTOMS CHARTS

STEPS IN CYCLE OF FUNCTIONING	FAILURE SYMPTOMS	CHART NO.
LOADING	Cartridge will not go into barrel	1
CHAMBERING	Barrel will not pull back	2
LOCKING	Barrel pulls back but will not stay locked back	3
FIRING	No hole in label	4
UNLOCKING	Barrel will not pull forward	5
EXTRACTING	Barrel pulls forward and cartridge stays in chamber	6
EJECTING	Cartridge does not eject	7
COCKING	Can see firing pin with barrel in open position	8
SAFETY CHECKS	Safety will not go on "SAFE" position	9
	Safety will not stay on selected position	10
	Fires with safety on "SAFE" position	10
	Sight leaf will not stay on selected range	11

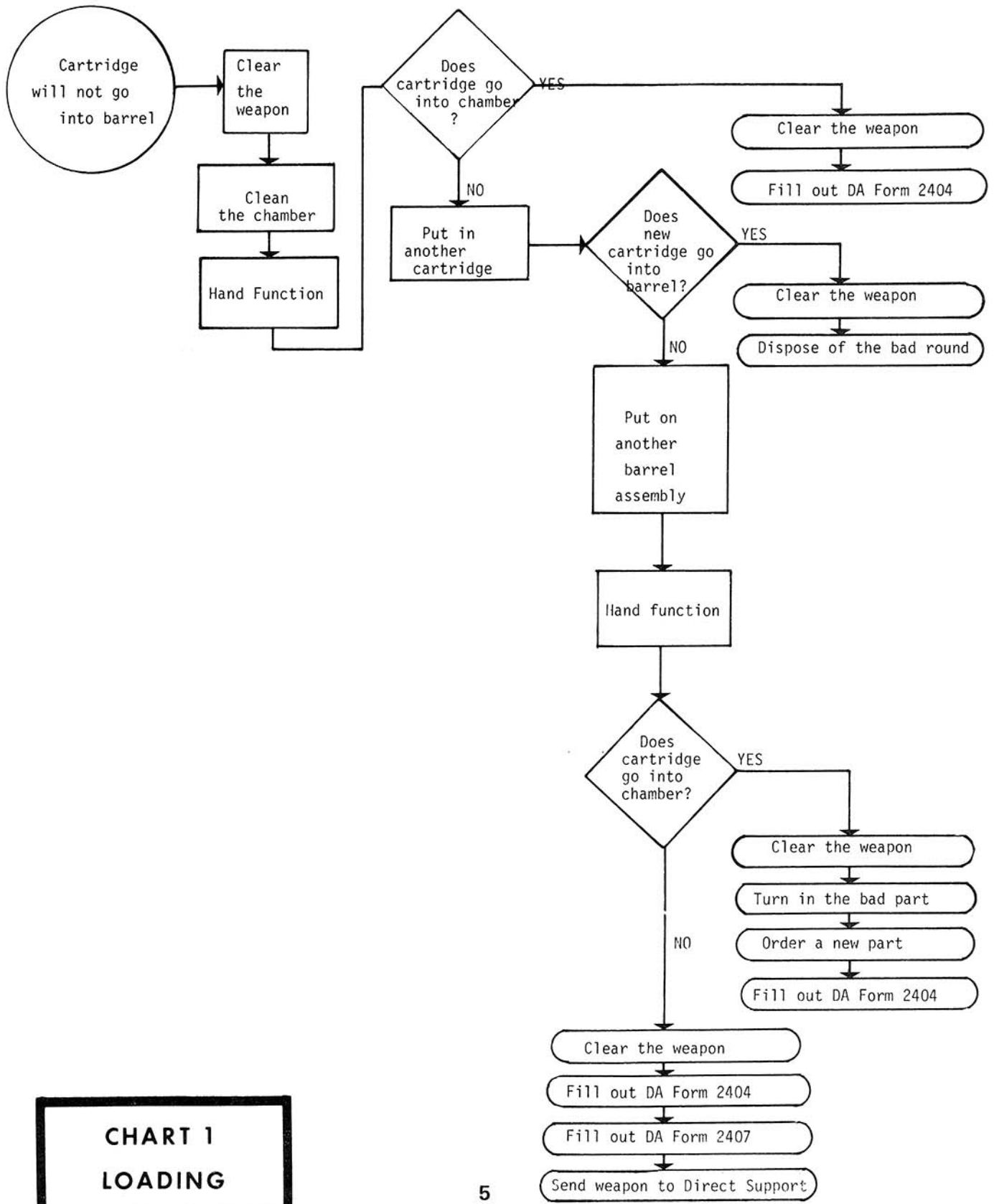
HOW TO READ THE CHART

This is the failure symptom

This tells you what to do

This asks a question

This tells you the final actions to take



**CHART 1
LOADING**

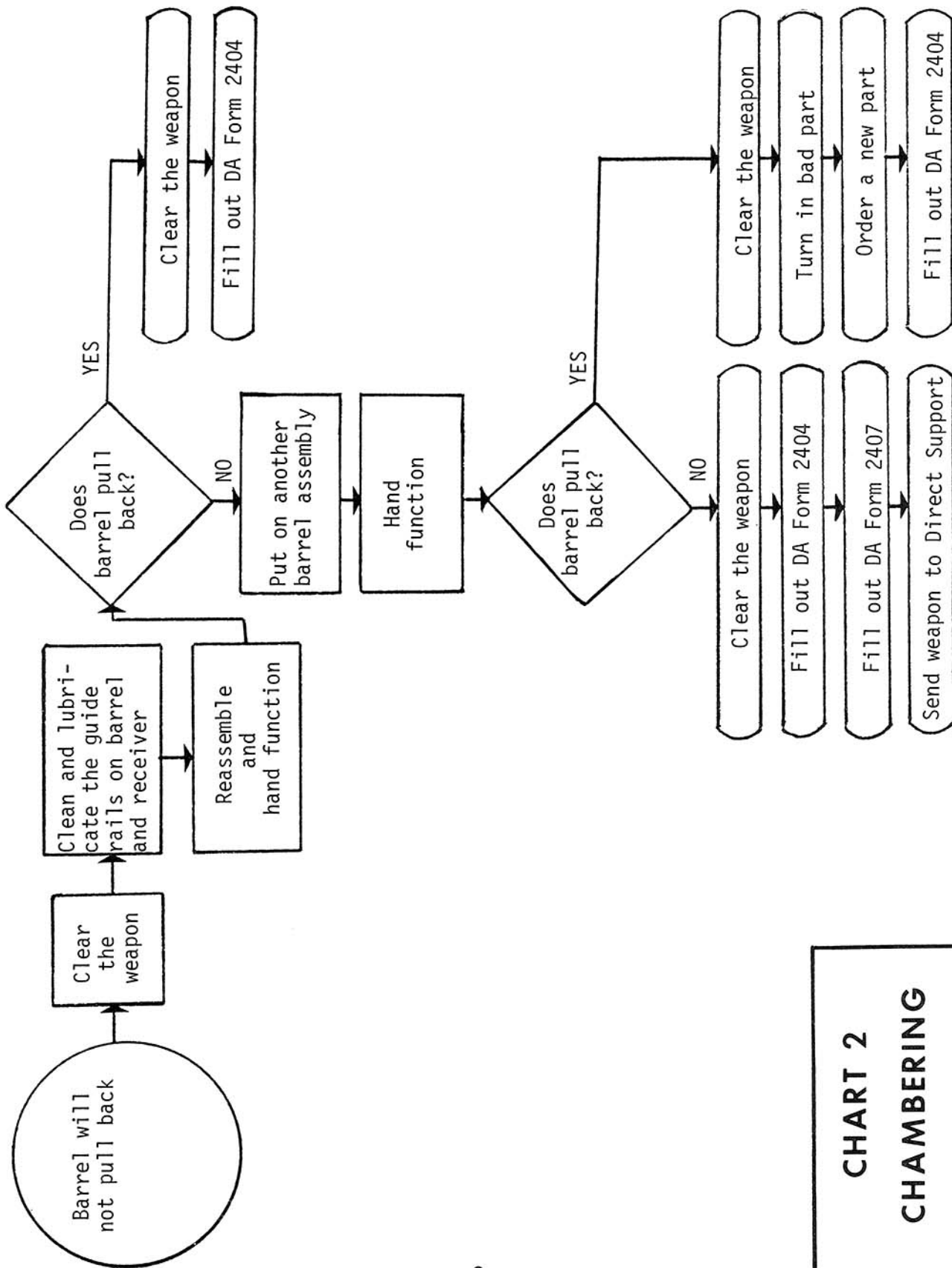


1
2
3

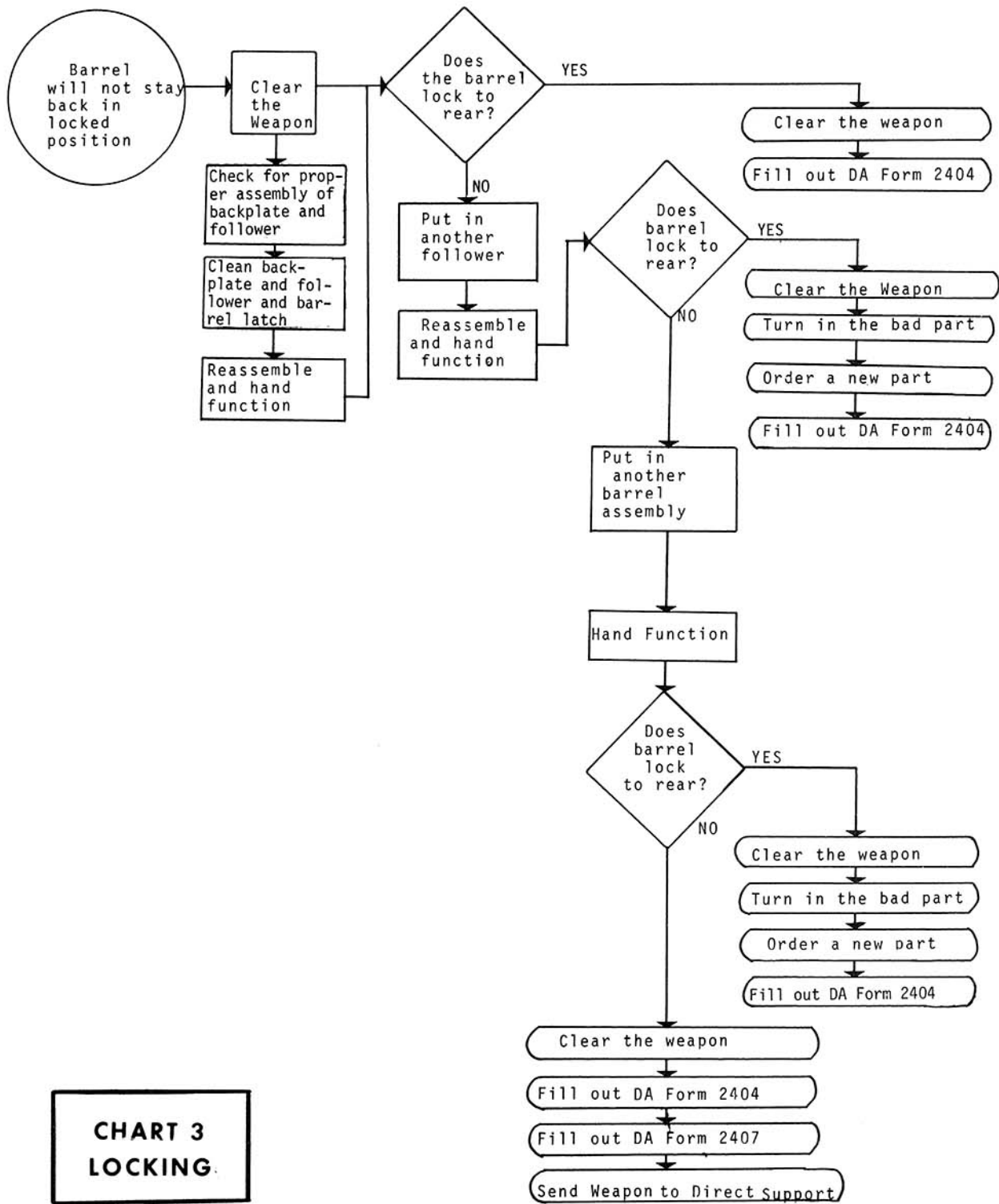


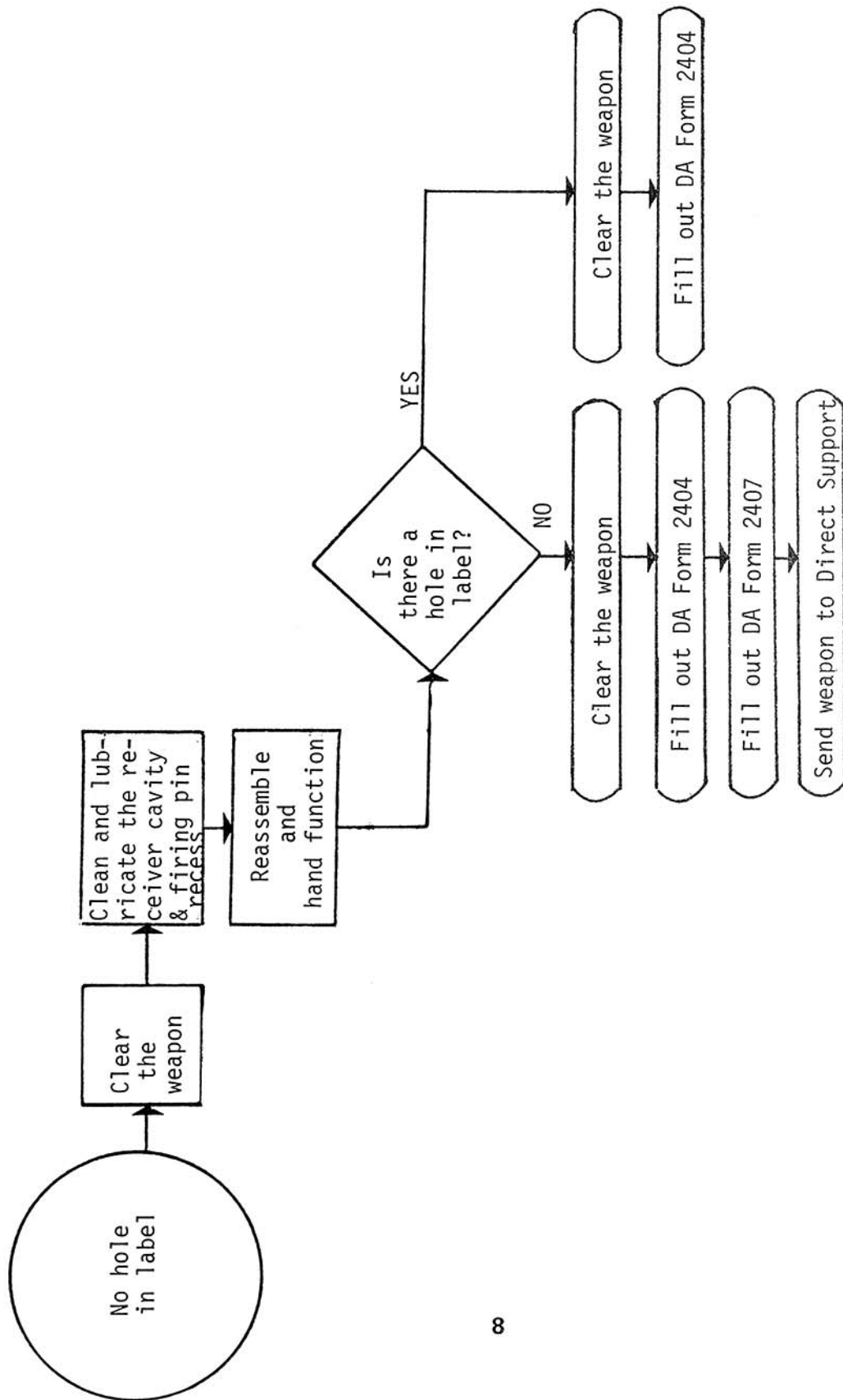
4
5
6



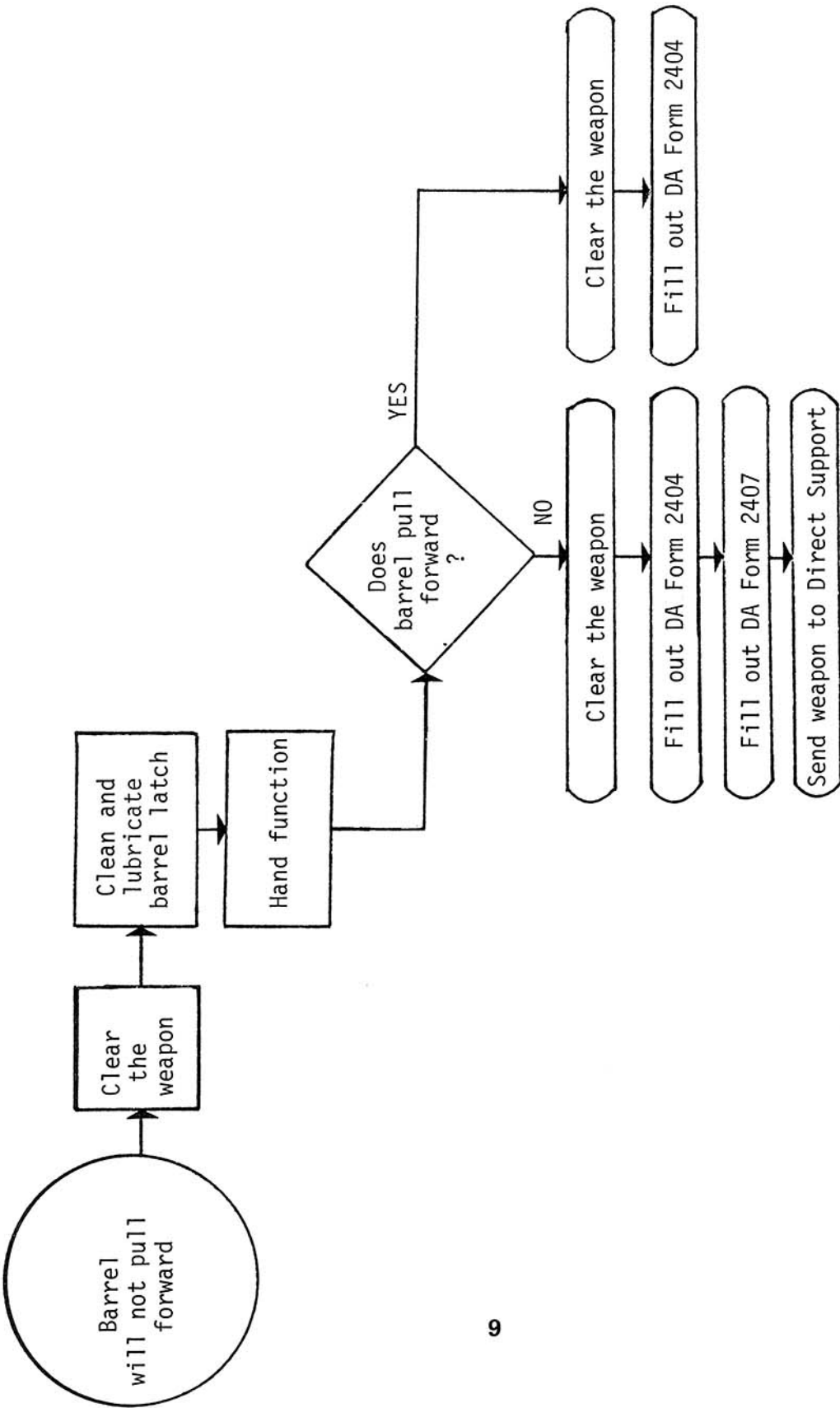


**CHART 2
CHAMBERING**

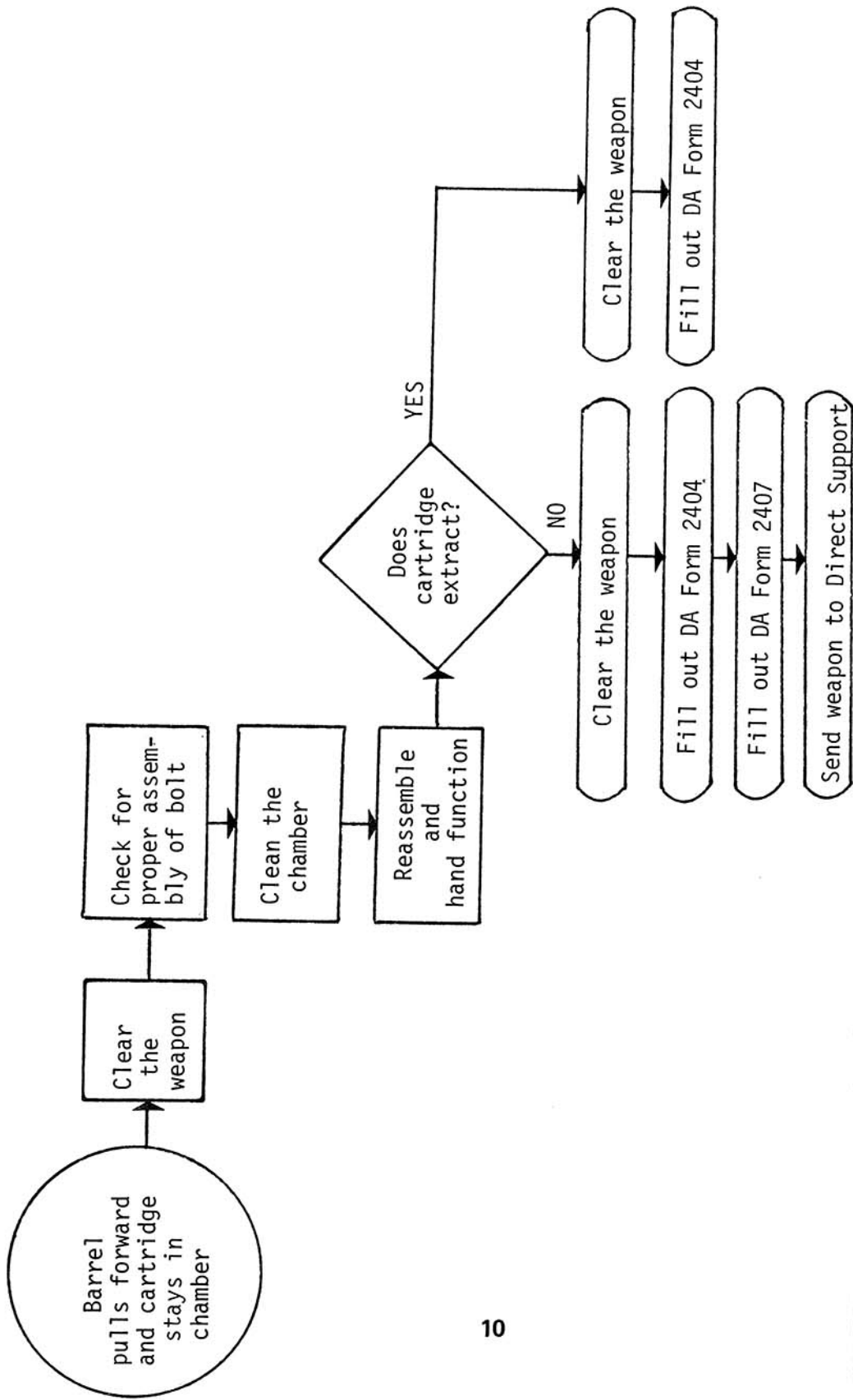




**CHART 4
FIRING**



**CHART 5
UNLOCKING**



**CHART 6
EXTRACTING**

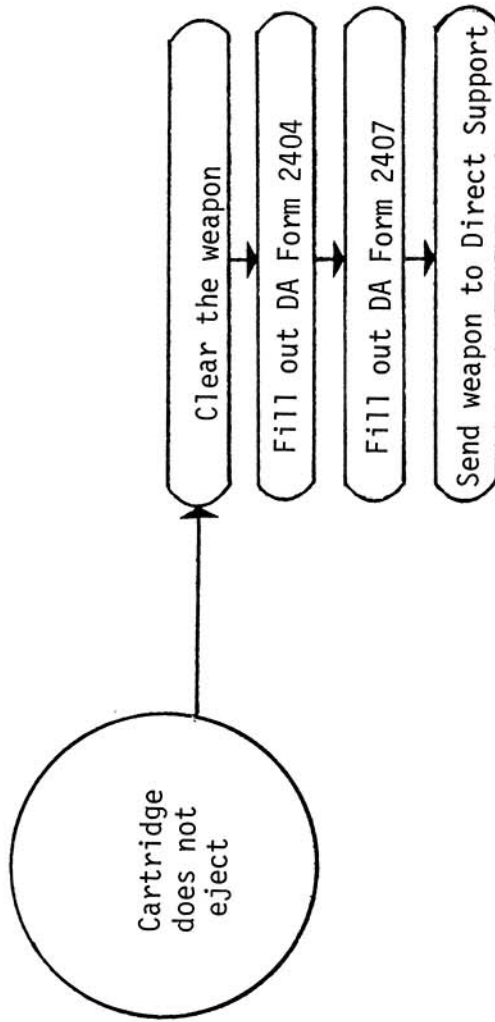
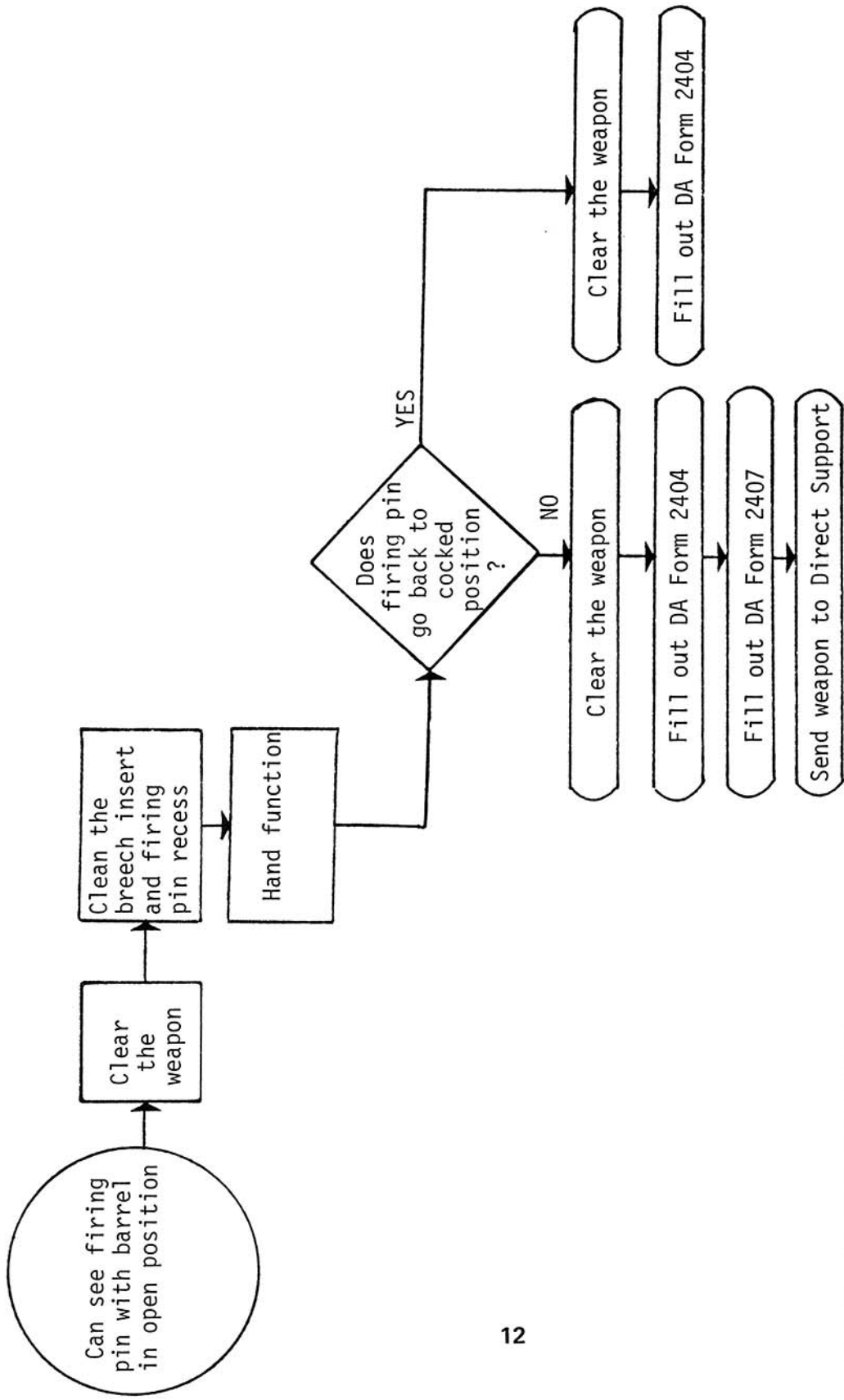
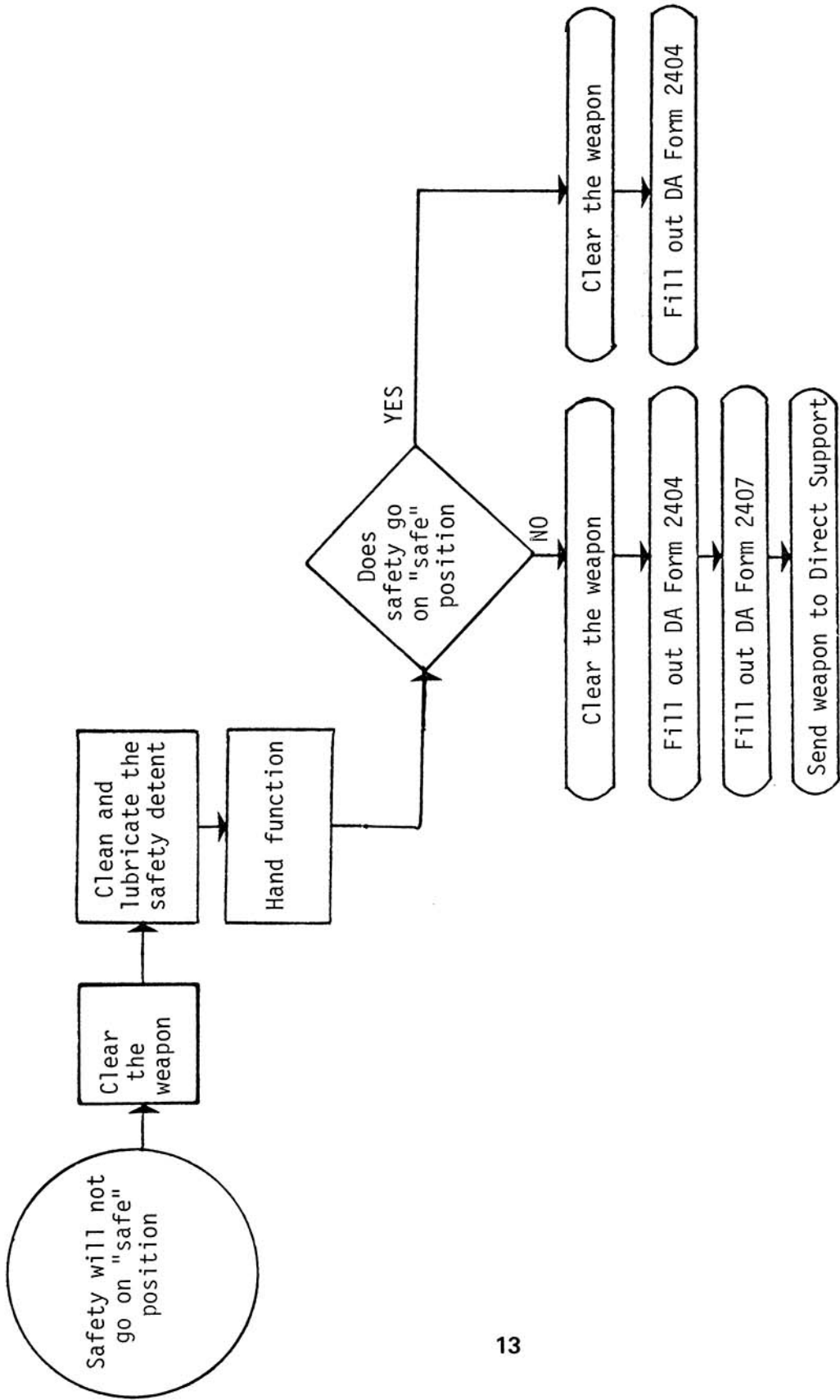


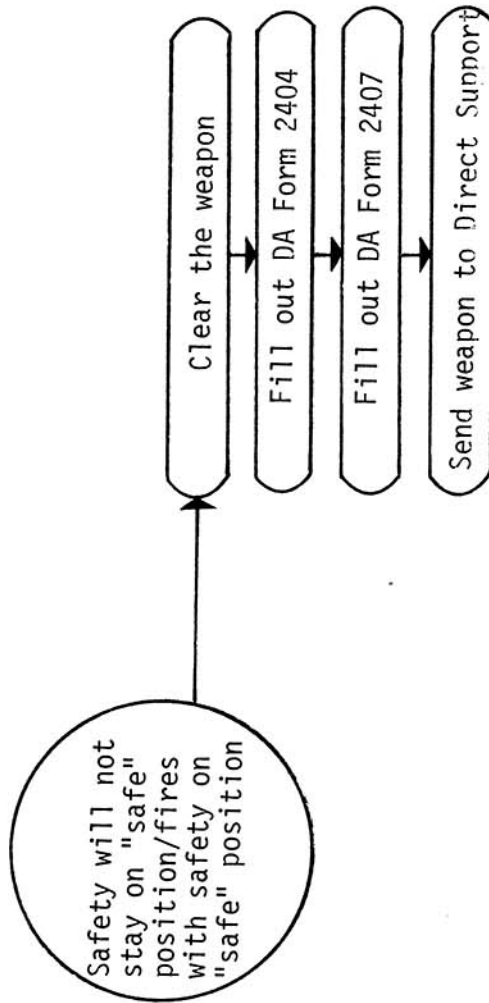
CHART 7
EJECTING



**CHART 8
COCKING**



**CHART 9
SAFETY**



**CHART 10
SAFETY**

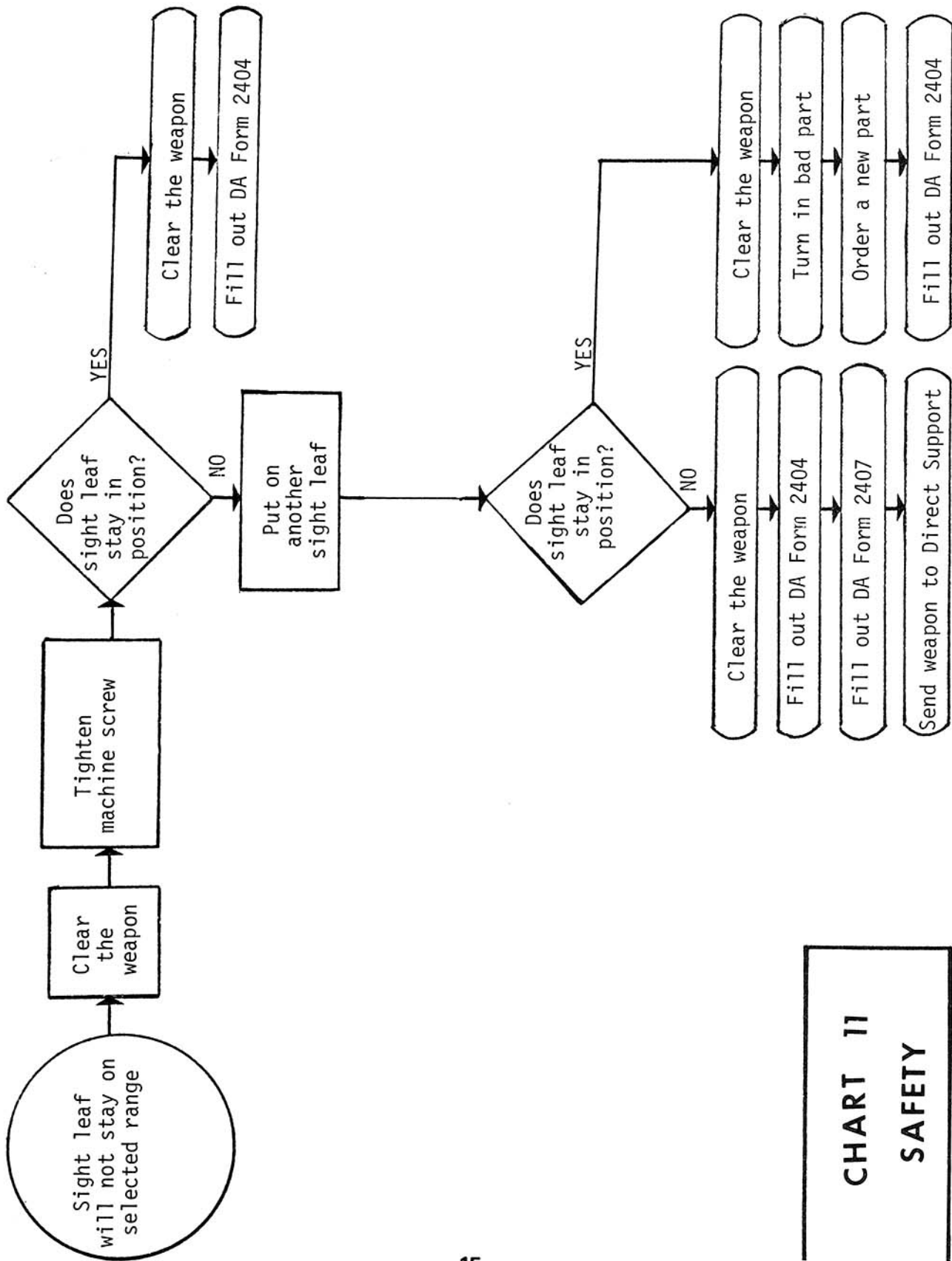


CHART 11
SAFETY