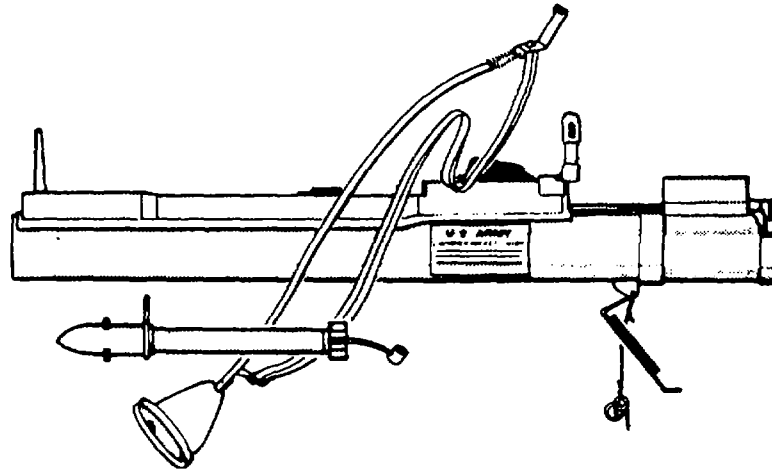


DEPARTMENT OF THE ARMY MANUAL

ROCKET LAUNCHER M190  
WITH SUBCALIBER 35MM  
PRACTICE ROCKET M73

OPERATOR AND UNIT MAINTENANCE MANUAL



Approved for public release, distribution is unlimited,

---

20 FEBRUARY 1992

This manual supersedes TM 9-1340-203-20, 30 December 1990

## WARNING

- ALWAYS KEEP LOADED WEAPON POINTED DOWNRANGE. DO NOT STAND TO REAR OF LAUNCHER. DO NOT USE ROCKET IF SAFETY CLIP IS MISSING.
- LOAD, UNLOAD, OR FIRE WEAPON AT FIRING LINE ONLY, UNLESS WEAPON IS TRANSFERRED TO AUTHORIZED PERSONNEL.
- DO NOT USE WEAPON IF ROCKET OR LAUNCHER, OR BOTH, HAS BEEN DROPPED OR OTHERWISE EXPOSED TO DIRT.
- INSERT ROCKET ALL THE WAY INTO LAUNCHER BEFORE ATTACHING PRIMER BLOCK.
- DO NOT FIRE THE M190 SUBCALIBER TUBE WITH A CRACK, SPLIT, OR WORN CONDITION AT THE SHOULDER OF THE REAR METAL COLLAR; A BLOWN TUBE INCIDENT MAY OCCUR. A DAMAGED FIRING PIN SPRING OR EXCESSIVE CARBON BUILD-UP CAN CAUSE A MISFIRE.



- METER MARKINGS ON THE FRONT POST SIGHTS OF THE M190, M72A1, AND M72A2, LAUNCHERS CONTAIN SMALL AMOUNTS OF RADIOACTIVE MATERIAL FOR ILLUMINATION. THE SIGHTS DO NOT PRESENT A SIGNIFICANT HEALTH HAZARD BUT MUST BE CONTROLLED. IF SIGHT IS BROKEN, REMOVE AND PLACE IN A PLASTIC SEALED BAG. STORE BAG IN A SEALED CONTAINER UNTIL REMOVED BY AMMUNITION DISPOSAL PERSONNEL.

U  
AR 5095A

**CHAPTER 1. INTRODUCTION**

Section	I	General	
		Scope .....	3
		Forms, Records, and Reports .....	3
		Recommended Changes .....	3
	II	Description .....	4
	III	Data .....	7

**CHAPTER 2. MAINTENANCE AND OPERATION**

Section	I	Service Upon Receipt of Materiel	
		Inspection .....	9
		Modification .....	12
	II	Loading .....	18
	III	Back Blast Danger Zones With Practice Launcher .....	25
	IV	Preparation for Firing .....	26
	V	Firing Positions .....	28
	VI	Ready .....	29
	VII	Aim .....	30
	VIII	Fire .....	31
	IX	Reissue or Unloading .....	32
	X	Misfires, Hangfires, Mechanical Delays or Dud s .....	38
	XI	After Daily Use and After Storage .....	44
	XII	Storage and Transportation .....	46

<b>APPENDIX A. REFERENCES</b> .....	48
-------------------------------------	----

<b>APPENDIX B. MAINTENANCE ALLOCATION CHART</b> .....	49
---	----

**NOTE**

All Light Antitank Weapon (LAW) Launcher Configurations, including M72A2 and M72A3 models, are suitable for use with the M190 conversion kit. Requisition may be made for conversion launchers by requesting "Launcher, M72A1, for rkt 66MM, part number 9210200, NSN 1340-00-426-1013.

**SECTION I  
GENERAL**

**CHAPTER 1  
INTRODUCTION**

SCOPE. This manual describes modification of Rocket Launcher M72 Series to form Rocket Launcher M190. Launcher M190 loaded with Subcaliber Practice Rocket M73 forms a Practice Device for the 66MM Light Antitank Weapons Systems M72 Series. Maintenance and firing line loading, firing, and unloading procedures are provided.

FORMS, RECORDS, AND REPORTS. Maintenance forms and records requirements are explained in DA PAM 738-750.

RECOMMENDED CHANGES. Direct reporting of errors, omissions, and recommendations for improving this manual is authorized and encouraged. Use DA Form 2028, Recommended Changes to Publications and Blank Forms, for this purpose.

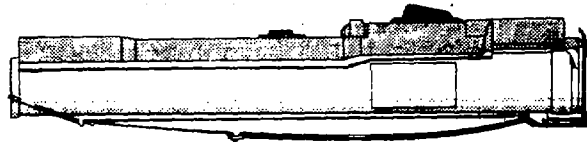
Forward completed forms to the Commanding Officer, U.S. Army Armament Research, Development and Engineering Center, ATTN: SMCAR-LMB, Picatinny Arsenal, NJ 07806-5000. A reply will be furnished directly to you.

u  
AR 5098A

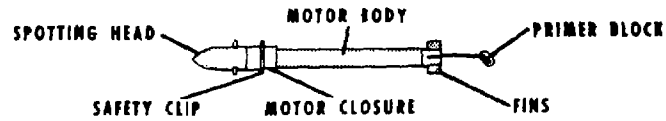
**SECTION II  
DESCRIPTION**

THE LIGHT ANTITANK WEAPON (LAW) SYSTEMS PRACTICE DEVICE CONSISTS OF:

- PRACTICE ROCKET LAUNCHER, M190 (MODIFICATION OF EXPENDED LAUNCHER M72A1 TO ACCEPT A SUBCALIBER ROCKET)



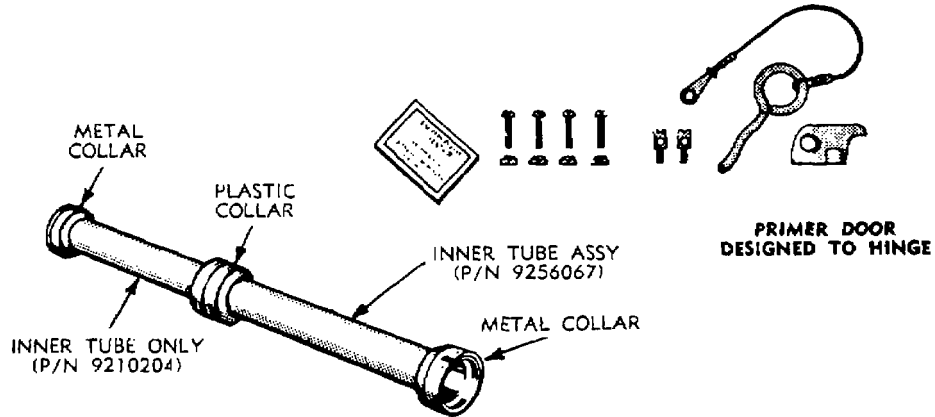
● **SUBCALIBER, 35MM, PRACTICE ROCKET M73**



U  
AR 5099

### Conversion Kit and Inner Tube Assembly

- CONVERSION KIT NSN 1340-00-420-7999 (For Complete Kit) CONSISTS OF SCREWS, NUTS, DOOR STUDS, LOCK PIN ASSEMBLY, NEW PRIMER DOOR, AND LABEL



- INNER TUBE ASSEMBLY OR SUBCALIBER TUBE IS ALUMINUM WITH A SMOOTH BORE MACHINED TO ACCEPT THE SUBCALIBER. 35MM, PRACTICE ROCKET

AFTER MODIFICATION THE PRACTICE DEVICE APPEARS SIMILAR TO THE LIGHT ANTITANK WEAPON SYSTEM, 66MM, M72 SERIES. THE SUBCALIBER ROCKET DIFFERENCE IN CALIBER AND WEIGHT DOES NOT AFFECT FUNCTION.



**SECTION III  
DATA**

- LAUNCHER, ROCKET: PRACTICE, M190  
(NSN 1055-00-143-6909)

Diameter	4.9 in.	Diameter of Rocket Tube	1.4 in.
Weight	5.02 lb	Sights Open. temperature compensating	
Length:		Trigger Load	Minimum 3 lb Maximum 7 lb
Collapsed	25.3 in.		
Extended	35.4 in.		
FUZE • Type	Impact, BD	Operating temp.	-10°F to + 135°F
Action:	Instantaneous	Storage temp.	-40°F to + 160°

- ROCKET, PRACTICE, 35 MM, SUBCALIBER: M73  
(NSN 1340-00-143-6911 and 1340-00-360-5050)

Diameter	1.38 in.	Propellant charge	3 tubular grains of propellant M7
Weight	0.34 lb.	Igniter charge	0.3 grams of black powder
Length w/o igniter	8.87 in.	Spotting head charge	1.5 grams of composition mix M80

Effective range 50 to 325 meters

\* Not a stocked item (made up by individual units).

SPARE/REPAIR PARTS KIT

**NEW**



**"NO SPARE"**

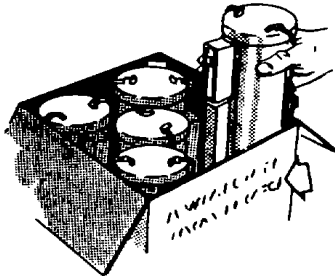
FOR ROCKETS CONVERTED TO M190 ROCKET LAUNCHER IN NEED OF MINOR PARTS ORDER: YOU'LL GET

- 1 REAR DOOR
- 1 REAR DOOR PIN ASSEMBLY
- 2 REAR DOOR SCREWS
- 1 LABEL (M190)
- 4 PHILLIPS HD MACH SCREWS
- 4 SELF LOCKING NUTS

KIT, INSTALLATION  
(M190)  
NSN 1055-01-011-8328

**SECTION I  
SERVICE UPON RECEIPT OF MATERIEL**

INSPECTION



**CHAPTER 2  
MAINTENANCE AND OPERATION**

- CHECK TO SEE THAT THE RECEIVING BOX AND CARDBOARD CARTONS ARE PROPERLY MARKED AND CONTAIN NECESSARY CONTENTS.
- CHECK BOX AND CONTAINER FOR WATER, DIET OR OTHER DAMAGE.
- IF EXTENSIVE DAMAGE IS APPARENT, CHECK LAUNCHERS CAREFULLY-CRACKS,BREAKS OR MISSING PARTS.

DISCARD UNSERVICEABLE LAUNCHERS

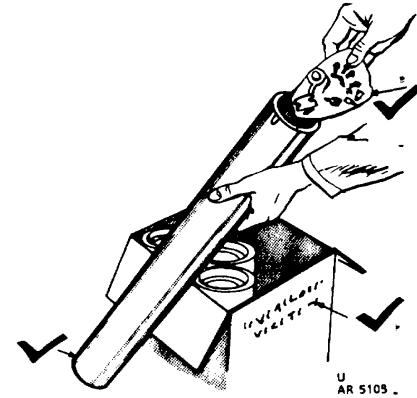
**1 EXPENDED LAUNCHERS**

## 2 SUBCALIBER TUBE AND TRAINING KIT OR INNER TUBE ASSEMBLY AND CONVERSION KIT

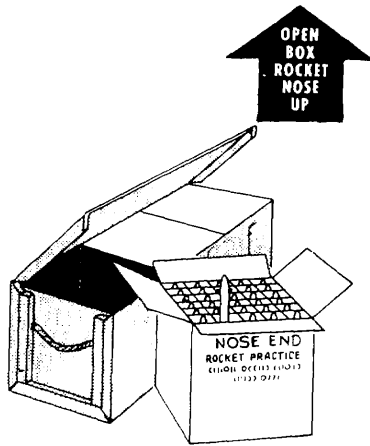
- CHECK TO SEE THAT RECEIVING BOX AND FIBERBOARD CONTAINER ARE PROPERTY MARKED AND CONTAIN NECESSARY CONTENTS. THE TRAINING KIT IS PLASTIC WRAPPED AND SHIPPED IN THE SUBCALIBER TUBE
- CHECK SUBCALIBER TUBE FOR DIRT, RUST, CRACKS AND PITTING
- CHECK TRAINING KIT FOR MISSING PARTS.

LOOK

IF EXTENSIVE DAMAGE IS APPARENT - USE BOX CONTENTS FOR SPARE PARTS. MARK BOX ACCORDINGLY



### 3 SUBCALIBER ROCKETS



U  
AR 5106



CHECK TO SEE THAT RECEIVING BOX  
ROCKETS AND FIBERBOARD CONTAINER ARE  
PROPERLY MARKED AND CONTAIN  
NECESSARY CONTENTS

IF EXTENSIVE VISIBLE DAMAGE IS NOTED  
RETURN ENTIRE BOX TO AMMUNITION  
SUPPLY POINT

STORE ALL BOXES ON DUNNAGE IN  
DRY SHELTERED AREA

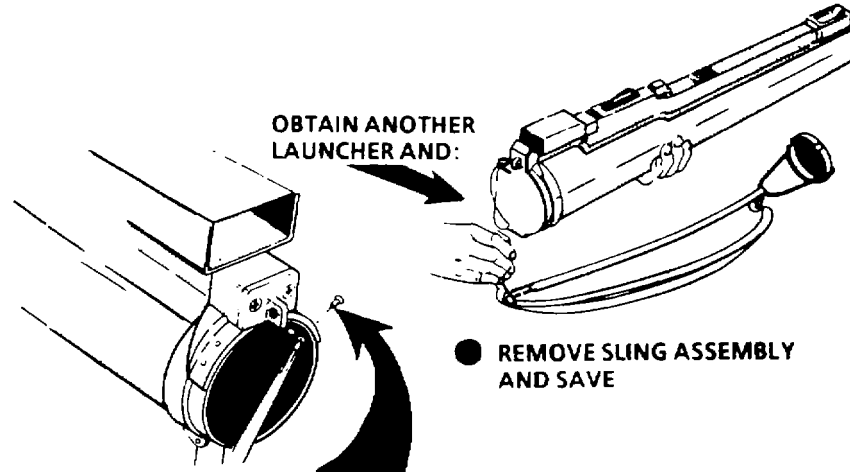
WOOD BOX (90 ROCKETS) (3 CARTONS)  
CARDBOARD CARTON (30 ROCKETS)

CHECK BOX CAREFULLY FOR FURTHER STORAGE INSTRUCTION

MODIFICATION

**WARNING**

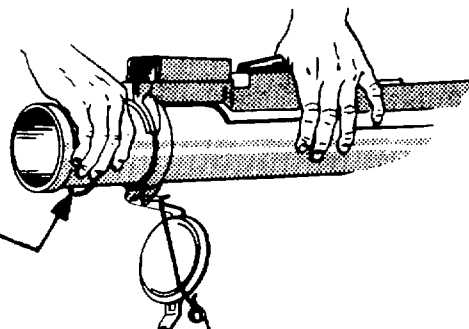
IF LAUNCHERS MARKED LIMITED FRONT SIGHT ARE RETURNED WITH FRONT SIGHT BROKEN, REMOVE SIGHT AND SEAL IN PLASTIC BAG. SEGREGATE SIGHT FOR DISPOSITION BY AUTHORIZED PERSONNEL IN ACCORDANCE WITH AR 385-11. DISCARD THIS LAUNCHER.



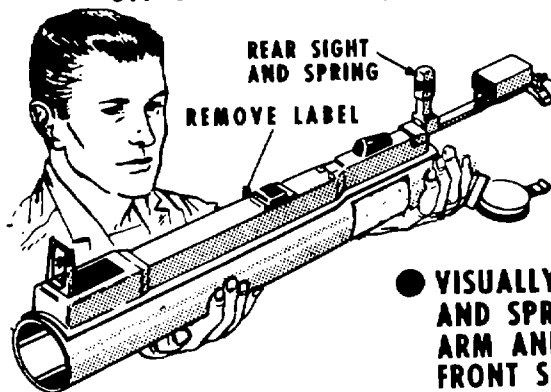
- PUNCH OUT RIVETS SECURING INNER TUBE TO LAUNCHER (OUTER TUBE) , USE 1/16" PUNCH DISCARD RIVETS

● REMOVE INNER TUBE

DISCARD O-RING

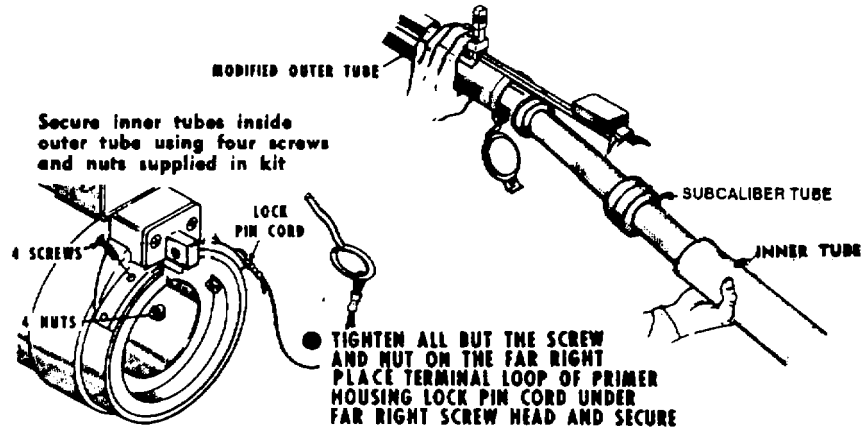


● REMOVE LABEL (SCRAPE OFF OR PAINT OVER)



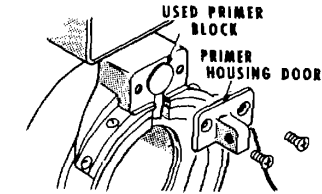
● VISUALLY INSPECT REAR SIGHT AND SPRING FIRING PIN HOUSING ARM AND FIRING PIN ASSEMBLY, FRONT SIGHT AND SPRING <sup>U</sup> AR 5108

- IF ASSEMBLY IS USABLE, THE SUBCALIBER TUBE IS PLACED INTO THE MODIFIED OUTER TUBE. THE INNER TUBE IS PLACED OVER THE REAR OF THE SUBCALIBER TUBE AND THE ENTIRE ASSEMBLY IS TELESCOPED INTO THE CLOSED POSITION.

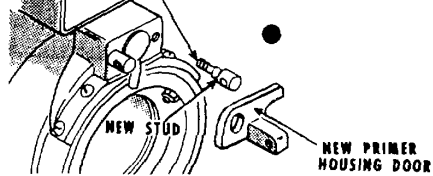


U  
AR 5109





STUD THREADS ARE  
COATED FOR FIRM HOLD



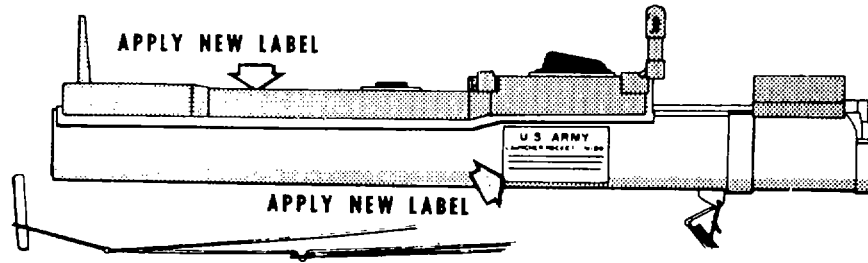
- REMOVE PRIMER HOUSING DOOR. DISCARD DOOR, AND RETAINING SCREWS.

**NOTE: RETENTION OF USED PRIMER BLOCK IN CAVITY WILL ASSIST IN POSITIONING NEW PRIMER HOUSING DOOR WHILE CEMENTING AND WILL ALSO PREVENT LOSS OF NEW DOOR AND LOCKPIN DURING TRANSIT AND HANDLING.**

- THREAD STUDS INTO HOUSING IMMEDIATELY AND PLACE NEW REAR DOOR AND PRIMER HOUSING LOCK PIN IN POSITION.

SWING DOOR SEVERAL TIMES  
TO ASCERTAIN PROPER FIT

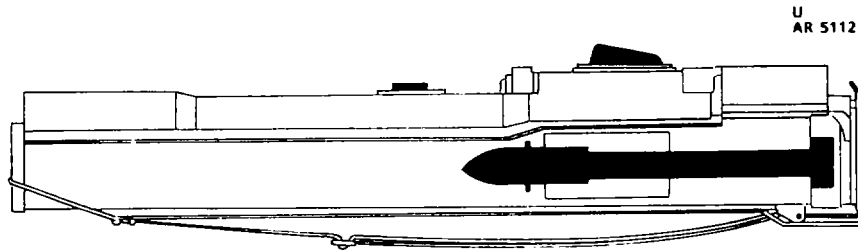
- TEST MECHANICAL FUNCTIONING OF COMPLETED LAUNCHER. SEE THAT TUBES SLIDE FREELY AND SIGHTS SWING TO CORRECT POSITION. RETRIEVE SLING ASSEMBLY AND ASCERTAIN THAT LAUNCHER OPENS AND CLOSES CORRECTLY AND SLING ASSEMBLY OPERATES PROPERLY.



IF COMPLETED LAUNCHER IS FREE OF MECHANICAL DEFECTS APPLY LABEL. LABEL IS PRESSURE SENSITIVE, SELF-ADHERING. PEEL OFF BACKING AND APPLY LABEL TO DRY SURFACE ONLY.

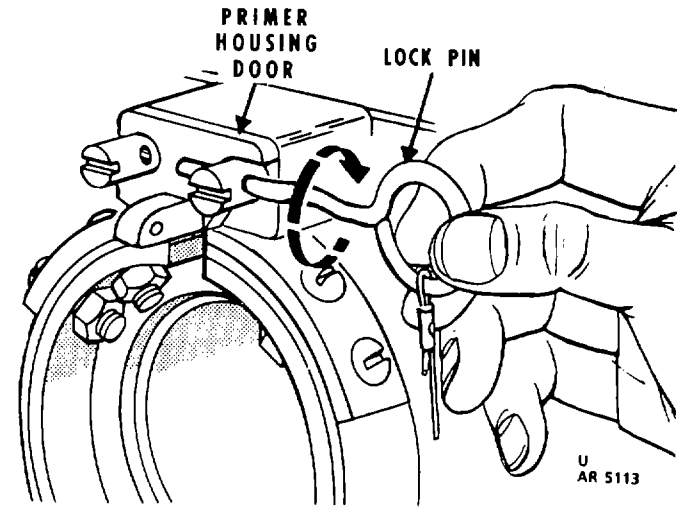
- IF
- FIRING PIN HOUSING RIVETS
  - OLD REAR PRIMER DOOR, GASKET AND SCREWS
  - OLD OUTER AND INNER TUBE O-RING HAVE BEEN DISCARDED AND

- IF
- SUBCALIBER TUBE AND OLD INNER TUBE
  - NEW FIRING PIN HOUSING SCREWS AND NUTS
  - NEW REAR DOOR STUDS
  - NEW REAR DOOR
  - NEW PIN ASSEMBLY
  - NEW LABEL
- HAVE BEEN ADDED CORRECTLY LAUNCHER  
IS COMPLETE AND READY TO RECEIVE SUBCALIBER  
ROCKET.

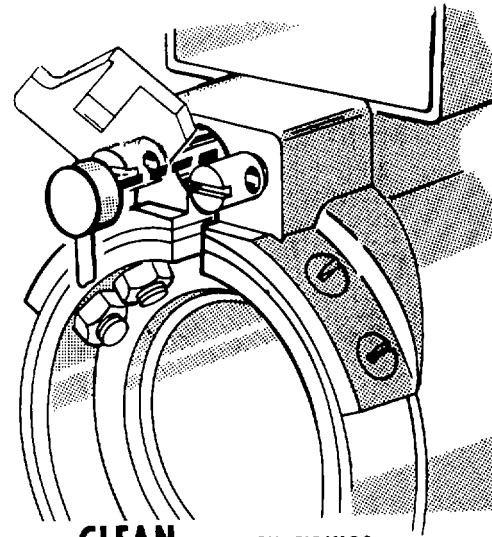


**SECTION II**  
**LOADING**

- TWIST AND REMOVE PRIMER HOUSING LOCK PIN
- SWING PRIMER HOUSING DOOR OUT OF WAY OF PRIMER BLOCK ENTRY



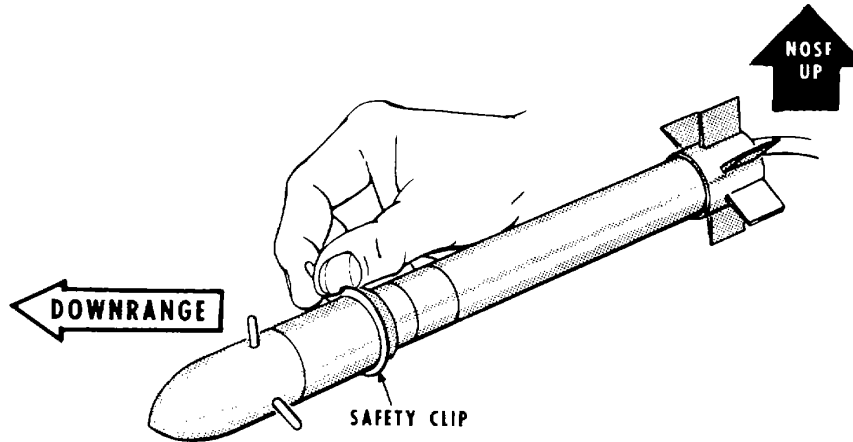
- REMOVE FIRED PRIMER BLOCK
- INSPECT PRIMER CAVITY
- INSPECT SUBCALIBER TUBE BORE
- SWAB BORE WITH RAG
- BLOW OUT DUST



KEEP **CLEAN** BETWEEN FIRINGS

U  
AR 5114

- OPEN ROCKET CONTAINER, CAREFULLY REMOVE ROCKET



**WARNING:**  
POINT ROCKET AND LOADED LAUNCHER DOWNRANGE AT ALL TIMES

**WARNING:**  
IF ROCKET SAFETY CLIP IS MISSING, CAREFULLY PLACE ROCKET FACING DOWNRANGE. ALERT AUTHORIZED PERSONNEL

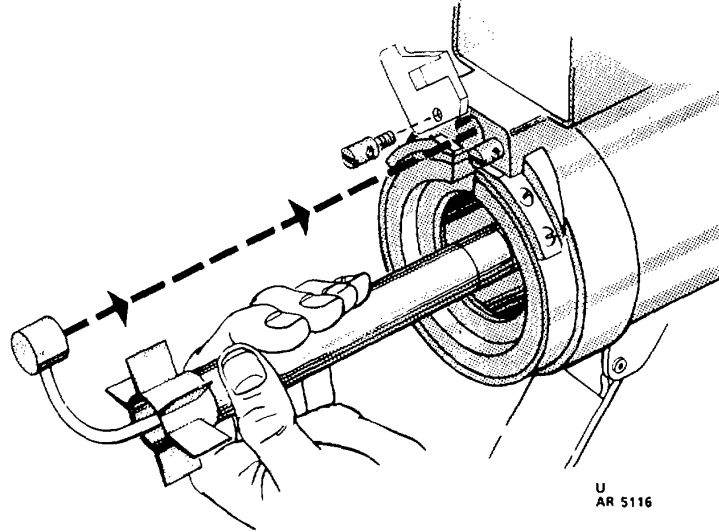
- TWIST AND REMOVE SAFETY CLIP FROM ROCKET. SAVE SAFETY CLIP IN CASE ROCKET IS NOT FIRED

**WARNING:**  
DO NOT STAND TO REAR OF LAUNCHER

- LOAD ROCKET

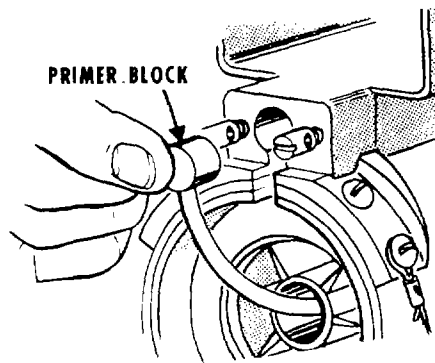
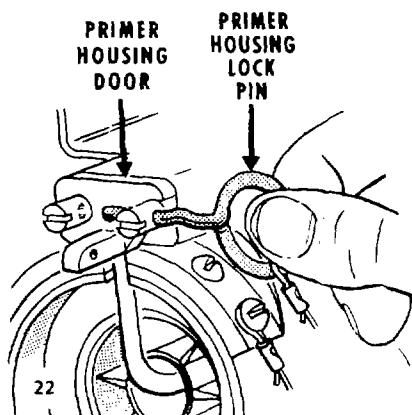
LINE UP PRIMER ON ROCKET WITH PRIMER HOUSING ON LAUNCHER

ROCKET MUST BE **FULLY** INSERTED IN LAUNCHER TUBE BEFORE PLACING PRIMER IN PRIMER HOUSING



U  
AR 5116

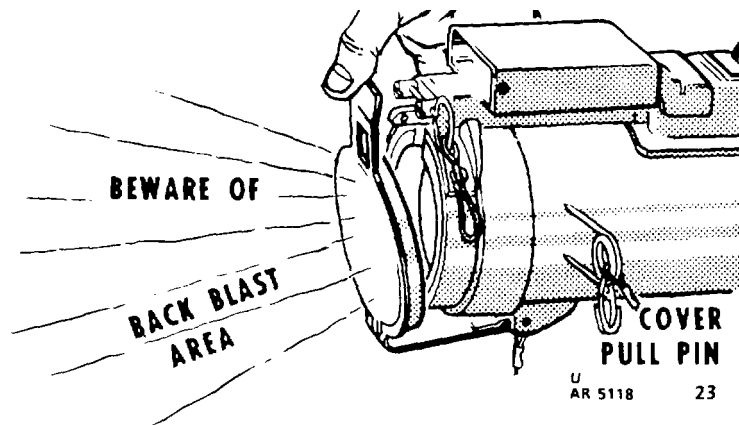
- GUIDE PRIMER BLOCK INTO HOUSING

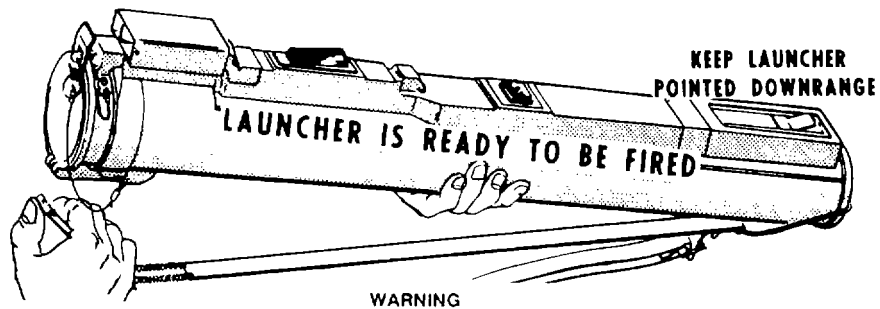


- REPLACE PRIMER HOUSING DOOR
- INSERT PRIMER HOUSING LOCK PIN



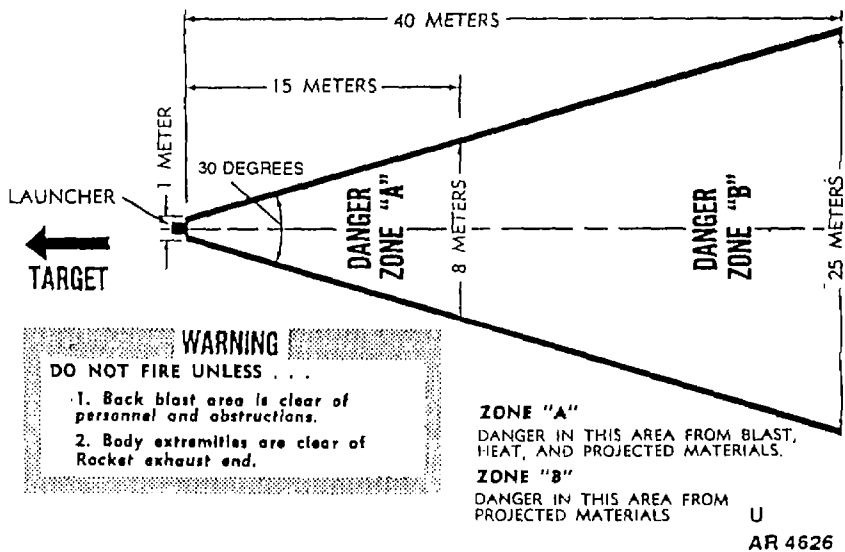
- REPLACE COVER
- REPLACE COVER PULL PIN
- REPLACE SLING ASSEMBLY





- IF LOADED WEAPON IS NOT USED IMMEDIATELY, INSTRUCTOR SHOULD CAREFULLY PLACE CLOSED WEAPON POINTING DOWNRANGE.
- LAUNCHER TUBES SHOULD BE KEPT CLEAN AND THE SLING ASSEMBLY REPLACED BETWEEN FIRINGS. LAUNCHERS USED AND REUSED SEVERAL TIMES SHOULD BE LIGHTLY CLEANED WITH DRY CLOTH, AND INSPECTED AND SERVICED AS DETAILED IN SECTION XI.
- WEAPON SHOULD BE USED OR UNLOADED AS SOON AS POSSIBLE.
- DUE TO POSSIBILITY OF INJURY FROM FRAGMENTS OF PREMATURE FUNCTIONING AND/OR MOTOR RUPTURES, OPERATORS, INSTRUCTORS AND OBSERVERS SHOULD USE SAFETY EYEWEAR U (GLASSES WITH SIDE SHIELDS OR GOGGLES).

**SECTION III  
OBSERVE BACK BLAST DANGER ZONES  
WITH PRACTICE LAUNCHER**

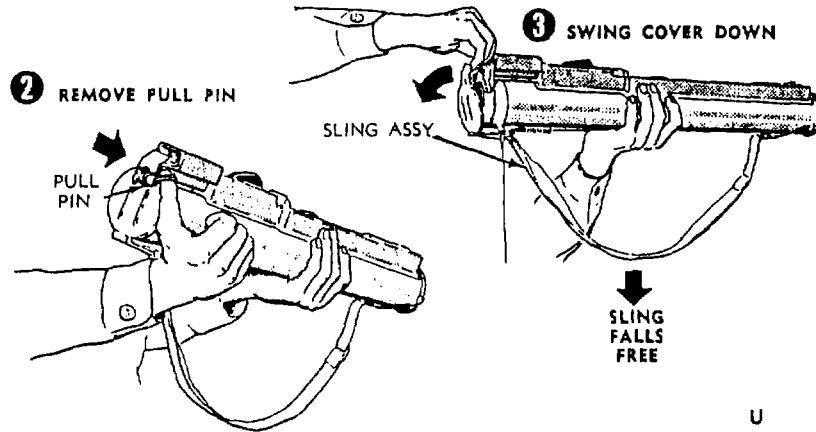


SECTION IV



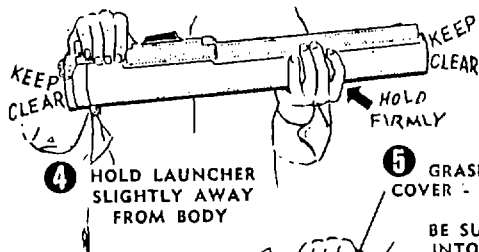
# PREPARATION FOR FIRING

**1** The Following Steps Are Performed At The Firing Point.

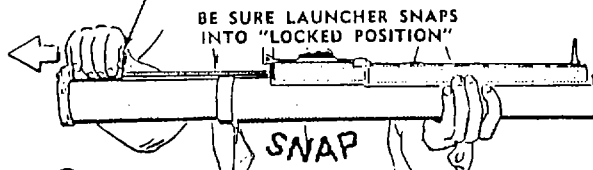


U  
AR 4627

IF TWO ATTEMPTS TO LOCK  
LAUNCHER OPEN FAIL -  
CLOSE AND SET SYSTEM ASIDE  
FOR DISPOSAL BY AUTHORIZED  
AMMUNITION PERSONNEL  
(SEE SECTION IX FOR  
CLOSING WEAPON)



5 GRASP REAR SIGHT COVER - HOLD FIRMLY



6 EXTEND BY PUSHING OUT WITH RIGHT HAND

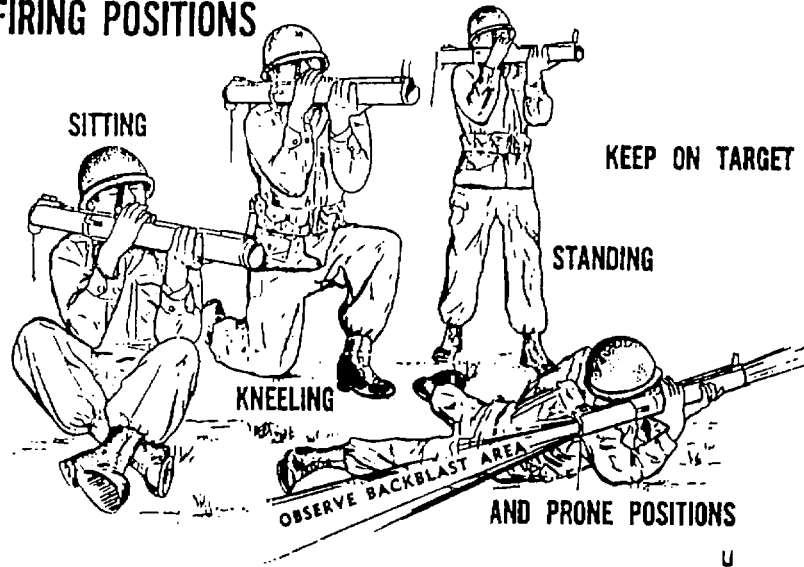
KEEP LAUNCHER ON TARGET

WARNING EXTENDING THE WEAPON TOO SLOWLY CAN RESULT IN FAILURE TO COCK THE WEAPON.

U  
AR 4628

SECTION V

FIRING POSITIONS

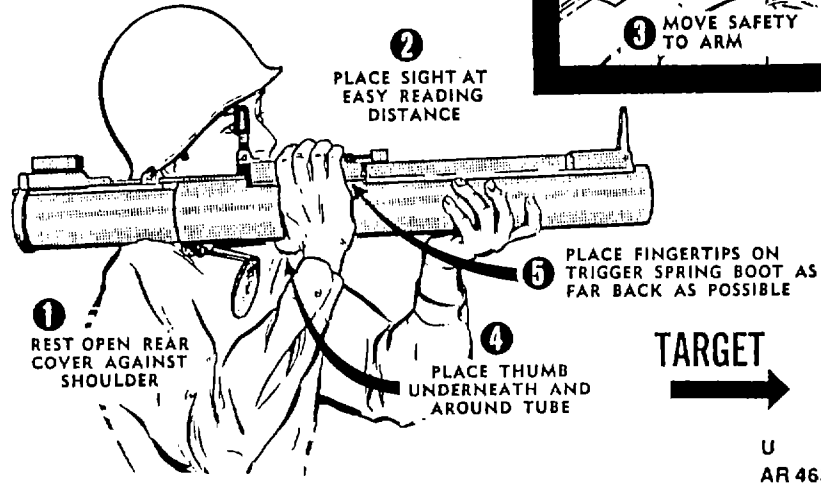
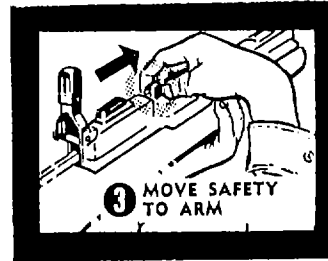


U  
AR 4629

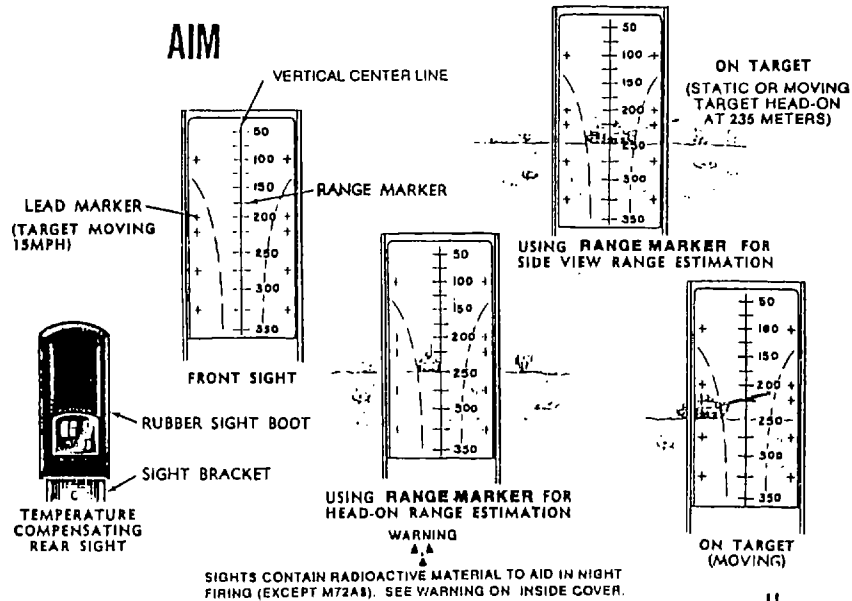
SECTION VI

READY

WARNING  
WEAR EAR PLUGS WHEN  
FIRING THE WEAPON.



SECTION VII



U  
AR 4631

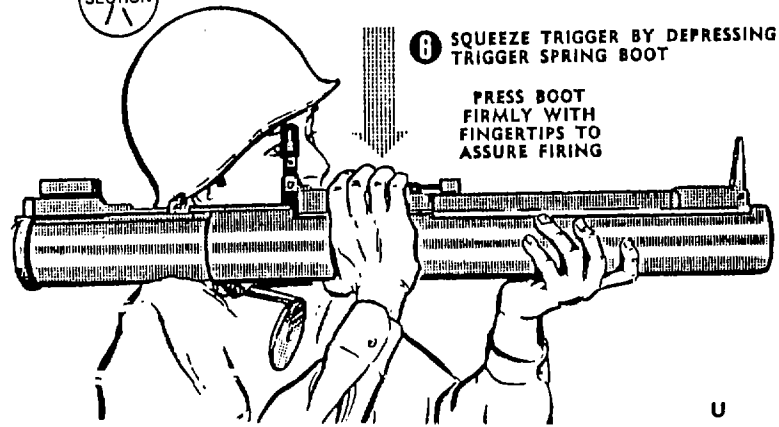


SECTION VIII

**FIRE**

KEEP LAUNCHER  
ON TARGET  
IF SYSTEM DOES  
NOT FIRE FOLLOW  
INSTRUCTIONS IN

SECTION



**8** SQUEEZE TRIGGER BY DEPRESSING  
TRIGGER SPRING BOOT

PRESS BOOT  
FIRMLY WITH  
FINGERTIPS TO  
ASSURE FIRING

U  
AR 4632

SECTION IX

REISSUE OR UNLOADING

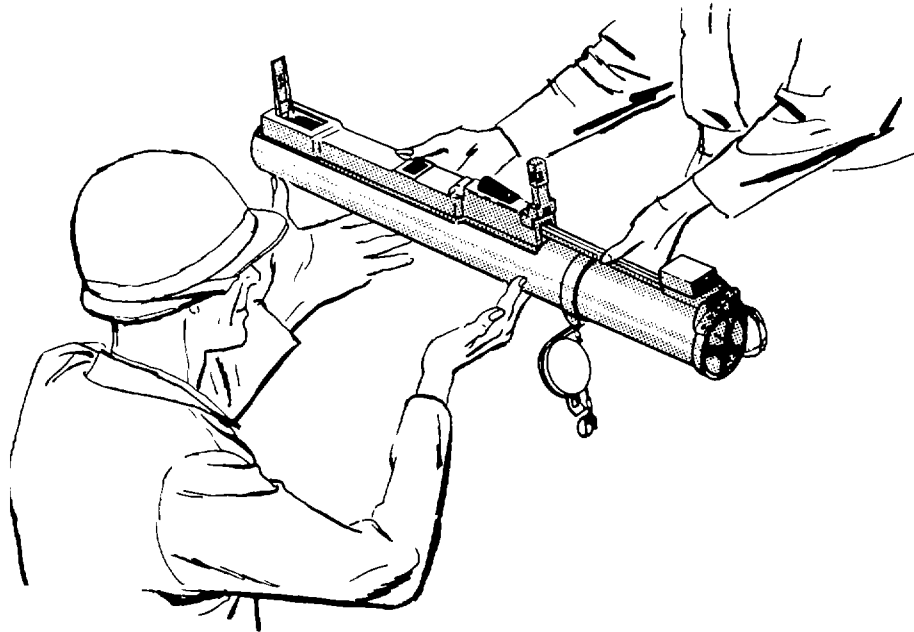
OPERATOR

1. RETURN SAFETY TO SAFE



2. GRADUALLY REMOVE WEAPON FROM SHOULDER

**INSTRUCTOR**



**1. DEMAND RETURN OF WEAPON IMMEDIATELY**

## INSTRUCTOR

2

GRASP LAUNCHER  
BY REAR SIGHT  
HOUSING



KEEP ON  
TARGET

3

SQUEEZE  
DETENT  
BOOT

6

HOLD DOWN  
FRONT SIGHT

4

SLIDE INNER TUBE INTO  
OUTER TUBE APPROXIMATELY  
TWO INCHES

7

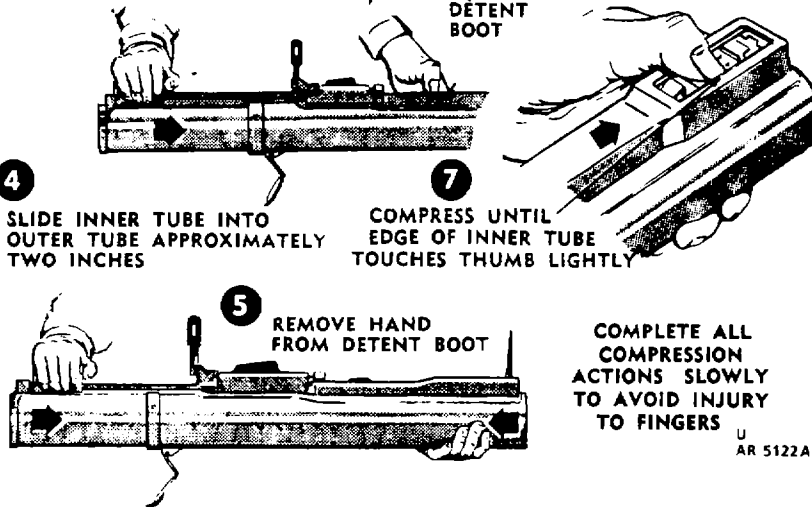
COMPRESS UNTIL  
EDGE OF INNER TUBE  
TOUCHES THUMB LIGHTLY

5

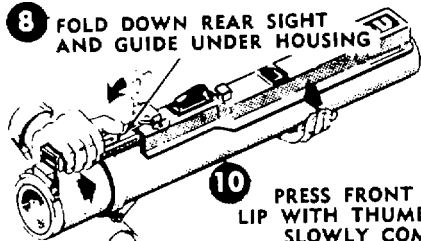
REMOVE HAND  
FROM DETENT BOOT

COMPLETE ALL  
COMPRESSION  
ACTIONS SLOWLY  
TO AVOID INJURY  
TO FINGERS

U  
AR 5122A

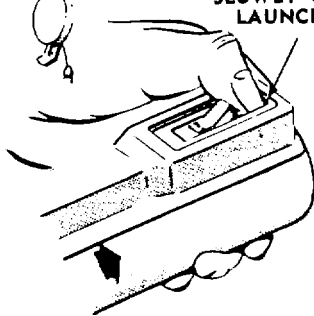


**8** FOLD DOWN REAR SIGHT  
AND GUIDE UNDER HOUSING

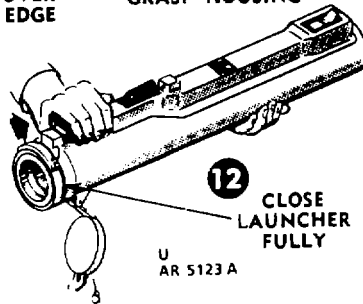


**9** COMPRESS LAUNCHER  
UNTIL TRAVEL IS  
STOPPED BY LIP ON  
FRONT SIGHT

**10** PRESS FRONT SIGHT  
LIP WITH THUMB AND  
SLOWLY COMPRESS  
LAUNCHER OVER  
LIP EDGE



**11** REMOVE THUMB  
FROM FRONT  
SIGHT AND  
GRASP HOUSING

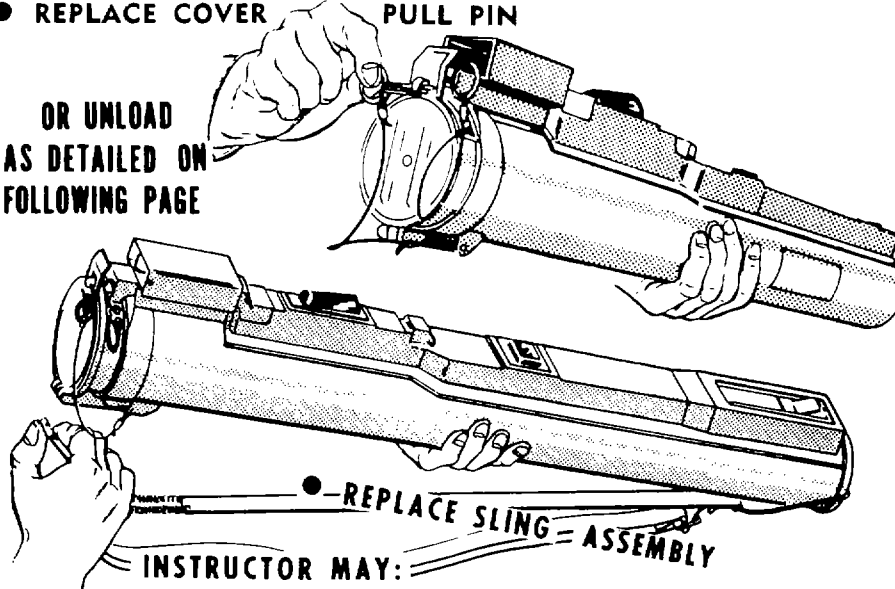


**12** CLOSE  
LAUNCHER  
FULLY

U  
AR 5123 A

- REPLACE COVER PULL PIN

OR UNLOAD  
AS DETAILED ON  
FOLLOWING PAGE



INSTRUCTOR MAY:

- REISSUE TO TRAINEE
- CAREFULLY PLACE LAUNCHER AT FIRING STATION

U  
AR 5124A

**TO UNLOAD KEEP LAUNCHER ON TARGET.**

**DO NOT REPLACE PIN COVER.**

**CAREFULLY REMOVE PRIMER FROM HOUSING.**

**POSITION LAUNCHER SO ROCKET WILL SLIDE EASILY TOWARD REAR.**

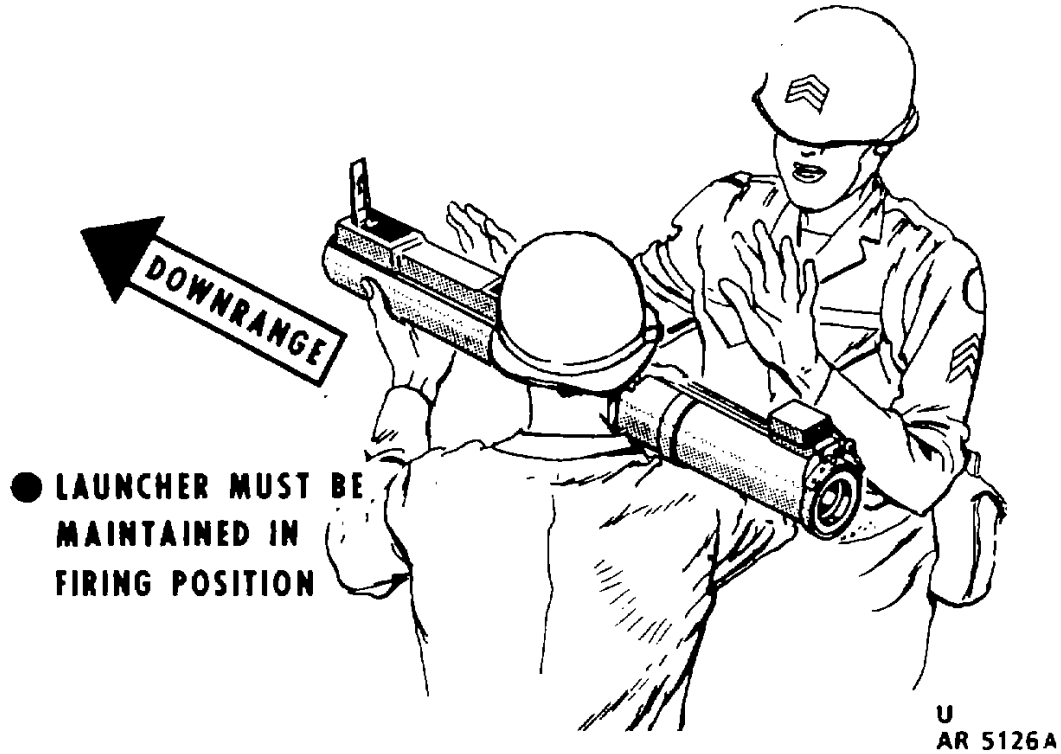
**REMOVE ROCKET.**

**REPLACE SAFETY CLIP**

**PLACE ROCKET IN ORIGINAL CONTAINER FACING UPWARD.**

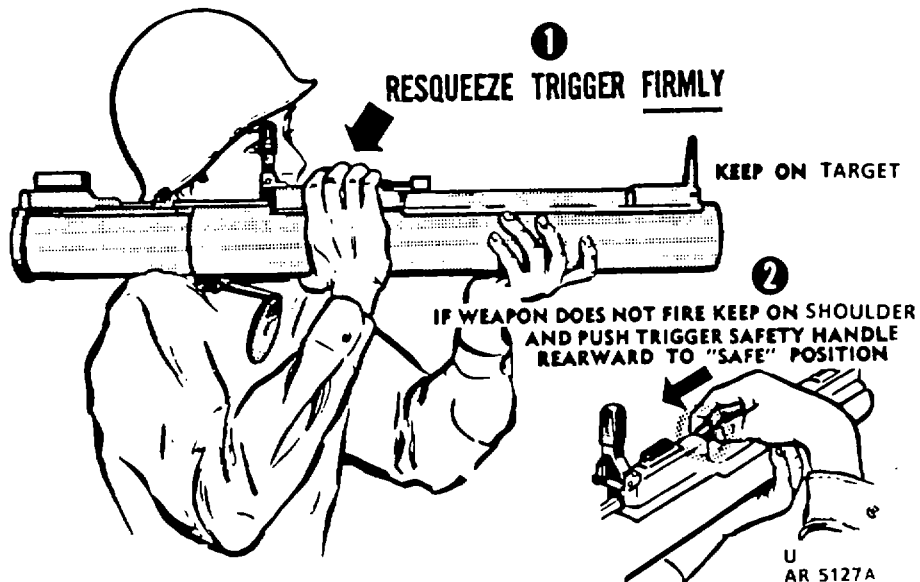
**PLACE LAUNCHER IN ORIGINAL CONTAINER.**

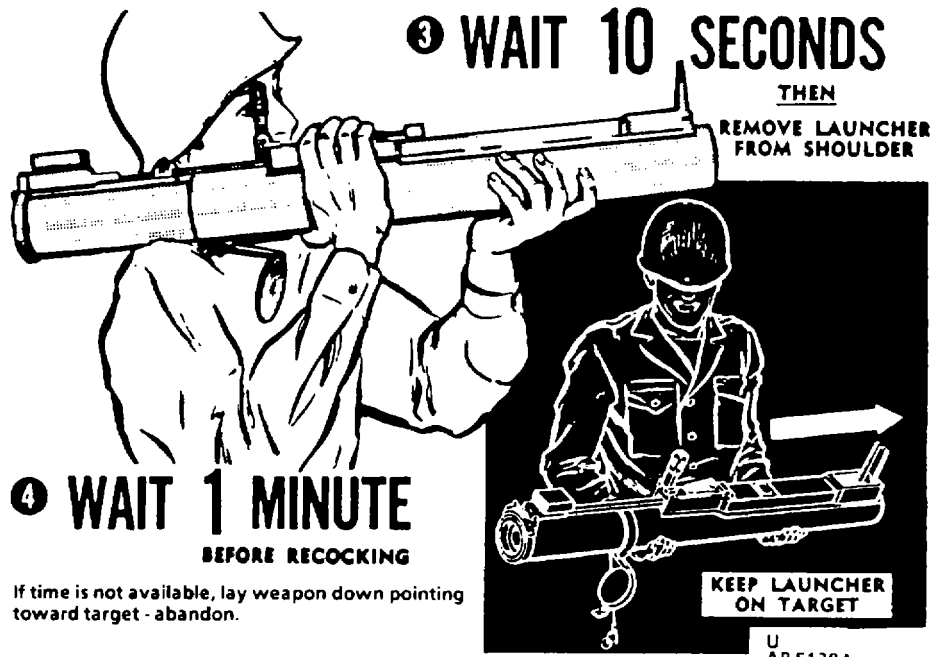
**UNLOAD OR RETURN ALL LAUNCHERS TO AUTHORIZED PERSONNEL AT FIRING LINE.**





FAILURE OF WEAPON TO FIRE IMMEDIATELY





**3 WAIT 10 SECONDS**

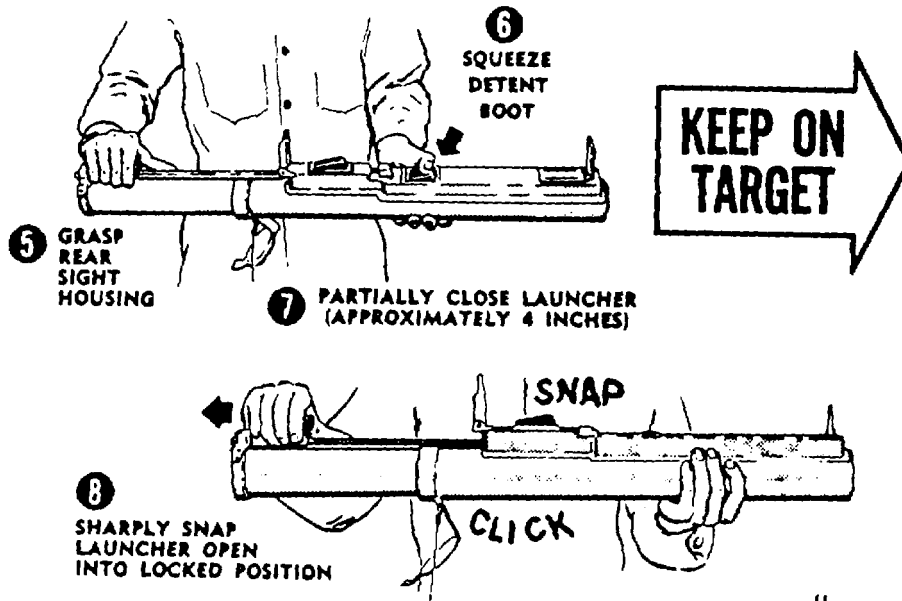
**THEN  
REMOVE LAUNCHER  
FROM SHOULDER**

**4 WAIT 1 MINUTE  
BEFORE RECOCKING**

If time is not available, lay weapon down pointing toward target - abandon.

**KEEP LAUNCHER  
ON TARGET**

U  
AR 5128A



U  
AR 5129A

**9** PLACE LAUNCHER BACK ON SHOULDER

KEEP  
LAUNCHER  
ON  
TARGET



**10**

PULL SAFETY FORWARD TO "ARM" →

**11**

AIM

**12**

DEPRESS TRIGGER BOOT FIRMLY TO FIRE

IF A RECOCKED WEAPON WHICH  
HAS MISFIRED STILL DOES  
NOT FIRE, PUSH TRIGGER  
SAFETY HANDLE TO "SAFE"  
POSITION AND WAIT

**10 SECONDS**

THEN

CAREFULLY LAY WEAPON ON GROUND FACING  
TARGET AND EVACUATE AREA

NOTIFY QASAS AND MUNITION  
PERSONNEL FOR DISPOSAL OF  
WEAPON OR SAFING AND  
RETENTION FOR INVESTIGATION.

PREPARE MALFUNCTION  
REPORT, DA FORM 4379.

U  
A4 5:30A

**DUDS**

**NOTIFY QASAS AND EOD PERSONNEL.  
PREPARE MALFUNCTION REPORT DA  
FORM 4379 (WITH PHOTOGRAPHIC  
DETAILS IF QASAS DEEMS NECESSARY).**



**KEEP LAUNCHER  
ON  
TARGET**

**U  
AR 5131A**

**DUDS WILL BE DESTROYED BY AUTHORIZED PERSONNEL ONLY**

## SECTION XI

### AFTER DAILY USE AND AFTER STORAGE

IF THE FOLLOWING PROCEDURES ARE APPLIED, THERE IS NO LIMITATION ON USE OF SUBCALIBER TUBES AND M190 LAUNCHERS.

INSPECT

TUBE BORE BY HOLDING UP TO LIGHT. LOOK FOR EXCESSIVE CARBON BUILD-UP AND CRACKING, PITTING, OR A WORN TUBE AT SHOULDER OF REAR METAL COLLAR OF TUBE.

M72 SERIES ROCKET LAUNCHER FOR CARBON BUILD-UP IN FIRING PIN HOUSING AREA WHICH COULD IMPEDE FIRING PIN MOVEMENT.

FIRING PIN SPRING AND FIRING PIN FOR PROPER WORKING CONDITIONS.

REJECT

TUBES WITH BULGES, DENTS, CURVES, CRACKS, PITS, AND EXCESSIVE WEAR AT SHOULDER OF REAR METAL COLLAR.

CLEAN	BORE BY SWABBING WITH MINERAL SPIRITS OR EQUIVALENT. DRY BY FORCING CLEAN RAG THROUGH BORE.
	CARBON FROM FIRING PIN HOUSING AREA OF LAUNCHER WITH A WIRE BRUSH.
PLACE	COVERS AND SLING ON CLOSED LAUNCHER FOR STORAGE.

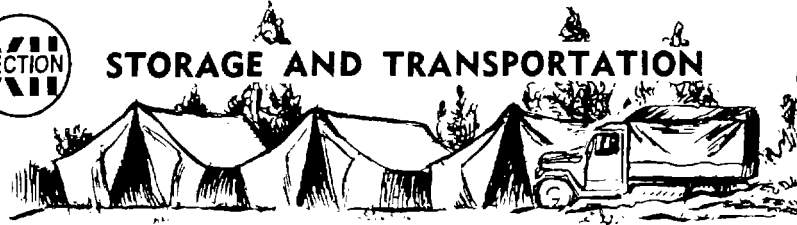
**WARNING**

**DO NOT FIRE M190 LAUNCHER WITH A SUBCALIBER TUBE WITH CRACKS, SPLITS, OR A WORN CONDITION AT SHOULDER OF REAR METAL COLLAR; A BLOWN TUBE INCIDENT MAY OCCUR. A DAMAGED FIRING PIN SPRING OR EXCESSIVE CARBON BUILD-UP CAN CAUSE A MISFIRE.**

SECTION XII



**STORAGE AND TRANSPORTATION**



- EXPENDED LAUNCHERS
- MODIFIED LAUNCHERS
- INNER TUBE ASSEMBLIES
  - EXPENDED KITS

**WILL BE IN ORIGINAL PACKING WHEN POSSIBLE AND SEPARATED ROCKETS AND MODIFIED LAUNCHERS WILL BE STORED IN SAME GENERAL AREA TO MAINTAIN LIKE TEMPERATURE.**

**FOR GENERAL CONUS STORAGE REQUIREMENTS**

**SEE TM 9-1300-206**



**MILITARY TRANSPORTATION USED FOR MOVEMENT OF HAZARDOUS MATERIAL IS SUBJECT TO ALL SAFETY LAWS, RULES AND REGULATIONS APPLICABLE TO COMMERCIAL CARRIERS. EXCEPTIONS MAY BE PERMITTED IN FOLLOWING INSTANCES:**

- 1. INTRA-DEPOT MOVEMENT UPON AUTHORIZATION OF THE THEATER COMMANDER.**
- 2. INTRA-THEATER MOVEMENT UPON AUTHORIZATION OF THE THEATER.**

**FREIGHT CLASSIFICATION AND HAZARD DESCRIPTION:**

- 1. RAIL: ROCKT AMMUNITION WITH EXPLOSIVE PROJECTILE (ROCKETS NOIBIN OTHER THAN GUIDED), CLASS A EXPLOSIVES, UFC 9 ITEM 5930.**
- 2. MOTOR: ROCKET AMMUNITION WITH EXPLOSIVE PROJECTILE (ROCKETS, NO1), CLASS A EXPLOSIVES, NMFC A10 ITEM 13880.\***
- 3. OUTSIDE PACKAGE MARKING: “ROCKETAMMUNITION WITH EXPLOSIVE PROJECTILE, CLASS A EXPLOSIVES - HANDLE CAREFULLY.”**

**\* Spotting charge in training rocket characterizes it as an explosive projectile**

## APPENDIX A. REFERENCES

### 1. ADMINISTRATIVE PUBLICATIONS

Malfunctions Involving Ammunition and Explosives.....	AR 75-1
Ionizing Radiation Protection (Licensing) Control, Transportation, Disposal, and Radiation Safety .....	AR 385-11
Accident Reporting and Records .....	AR 385-40
Regulations for Firing Ammunition for Training Target Practice and Combat.....	AR 385-63
Fire Protection .....	AR 420-90
Report of Item and Packaging Deficiencies.....	AR 735-11-2
Army Materiel Maintenance Concepts and Policies.....	AR 750-1

### 2. BLANK FORMS

Fire Reports.....	DA Form 5-2
Recommended Changes to Publications.....	DA Form 2028
Preliminary Ammunition Malfunction Feeder Report.....	DA Form 4379

### 3. TECHNICAL MANUALS

The Army Maintenance Management System (TAMMS) .....	DA PAM 738-750
Ammunition, General .....	TM 9-1300-200
Care, Handling, Preservation and Destruction of Ammunition.....	TM 9-1300-206
Military Explosives .....	TM 9-1300-214
60MM Light Antitank Weapon (LAW) M72A1 and M72A2 With Coupler and Practice Launcher M190 with M73 Practice Rocket .....	TM 9-1340-214-10
Demolition Materials .....	TM 9-1375-213-12

**APPENDIX B. MAINTENANCE ALLOCATION CHART  
PRACTICE ROCKET LAUNCHER M190**

(1) G R O U P  N U M B E R	(2)  Functional group	(3) Maintenance functions											(4) Tools and equipment	(5) Remarks	
		I N S P E C T	T E S T	S E R V I C E					I N S T A L L	A D J U S T	R E N O V A T E				
				U N P A C K	R E P A C K	C L E A N	T O U C H U P	M A R K			P A I N T	R E P A I R			R E P L A C E
	Inner tube M190	0	0	0	0	0	-	-	0	0	-	-	0	Hammer punch	
	Launcher M72A1 (used	0	0	0	0	0	0	0	0	0	0	0	0		
	Rear door pin assembly	0	0	0	-	0	-	-	0	0	-	0	0		
	Rear door	0	-	0	-	-	-	-	0	0	-	-	0		
	Stud	0	0	0	-	-	-	-	0	0	-	0	0		
	Screws	0	0	0	-	-	-	-	0	0	-	-	0		

**LEVEL OF RESPONSIBILITY**

C - Operator/crew  
O - Organization

D - Depot

F - Direct Support  
H - General Support

49 (50 blank)

...ANY QUESTIONS???



HAVE A SUGGESTION MAYBE?

WE AIM TO PLEASE.

*Write to us.*  
USE FORM DA2028



COMMANDING OFFICER  
U.S. Army Armament Research,  
Development and Engineering Center  
SMCAR-LMB  
Picatinny Arsenal, NJ 07806-5000



U  
AR 5138A

**Supersedes TM 9-1340-203-20, dated 30 December 1990**

By Order of the Secretary of the Army

Official:

MILTON H. HAMILTON  
*Administrative Assistant to the  
Secretary of the Army*  
01104

GORDON R. SULLIVAN  
*General, United States Army  
Chief of Staff*

**DISTRIBUTION:**

To be distributed in accordance with DA Form 12-40-E, Block 0858, requirements for TM 9-1340-224-12.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE  
DOPE ABOUT IT ON THIS FORM.  
CAREFULLY TEAR IT OUT, FOLD IT  
AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE  
NO.

PARA-  
GRAPH

FIGURE  
NO.

TABLE  
NO.

IN THIS SPACE, TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT.

PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER

SIGN HERE

PIN: 069655-000