

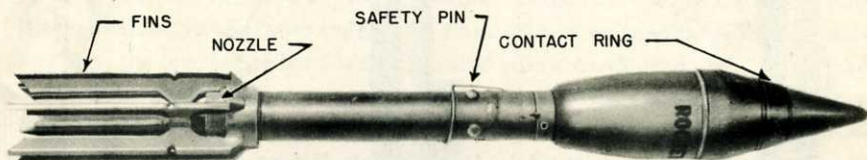
ORDNANCE FIELD SERVICE TECHNICAL)
BULLETIN NO. 200-6)

RESTRICTED

LAUNCHER, ROCKET, AT, M1

1. The following information is directed to Ordnance Department field personnel. The ordnance officer may disseminate this information at his own discretion to personnel of other arms and services (par. 31, FM 100-10, December 9, 1940).

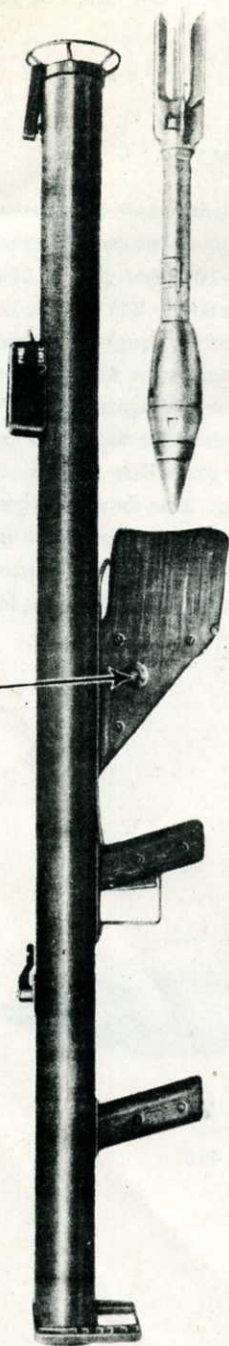
2. GENERAL. - The LAUNCHER, rocket, AT, M1 (formerly T1) (fig. 2) is an open tube approximately 54 in. long, 2.365 in. internal diameter, equipped with hand grips, stock, firing mechanism and sights. It is used to launch the ROCKET, AT, 2.36-in., M6 (fig. 1), which is a high explosive projectile for use against tanks and armored vehicles. The weapon may be fired from the shoulder and there is no recoil, since propulsion of the rocket is by jet action of the propelling powder. The rocket weighs approximately 3-1/2 lb and is 21-1/2 in. long. It is capable of penetrating heavy armor at angles of impact up to 30 degrees. The rockets can be used at distances up to 400 yards but the optimum range is between 200 and 300 yards. The muzzle velocity is about 300 fps. The ROCKET, practice, AT, 2.36-in., M7 is used for training in aiming and firing.



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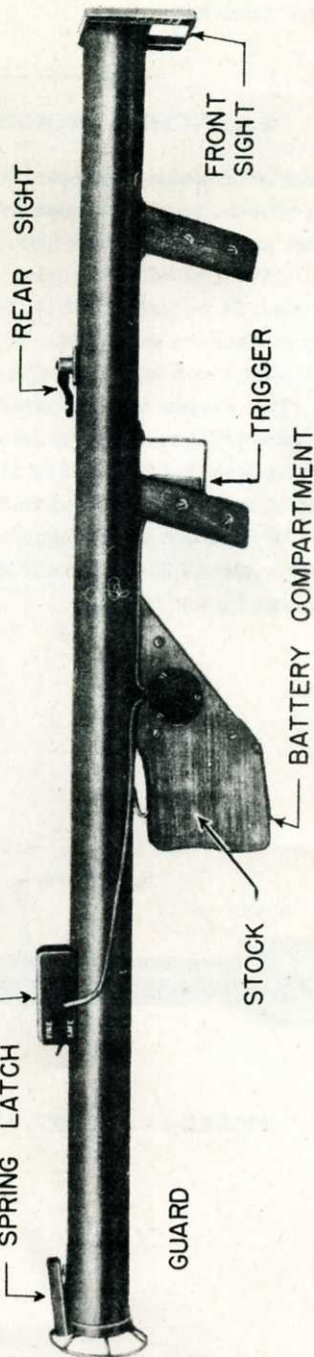
FIGURE 1 - ROCKET, AT, 2.36-IN., M6

ELECTRIC INDICATOR LAMP



LEFT SIDE

CONTACTOR MECHANISM



RIGHT SIDE

RA PD 24024

FIGURE 2 - LAUNCHER, ROCKET, AT, M1

LAUNCHER, ROCKET, AT, M1

3. DESCRIPTION. - a. Launcher. - (1) The launcher is a long tube provided with two hand grips and a stock. At the rear is a spring latch projecting partly across the tube, whose function is to engage notches in the tail of the rocket and hold it in position for firing.

(2) The weapon has a hinged rear sight, and a double fixed front sight. It may be fired from the right or left shoulder by swinging the rear sight to left or right as required. Launchers of recent manufacture have sights on the left side only. The front sight consists of four studs on each side of the tube, used for ranges of 100-, 200-, 300-, and 400-yards. Since the sights are fixed, intermediate ranges, lead, and windage must be estimated by the firer.

(3) The weapon is fired electrically by a trigger-operated switch, the circuit being energized by a two-cell dry battery in the stock. The battery is housed in the rear compartment above the metal latch. There is also an extra battery in the forward compartment of the stock. On the left side of the stock is a small electric lamp connected in parallel with the firing mechanism for testing the electric circuit and battery. This lamp lights when the trigger is pulled, irrespective of whether a rocket is in the launcher. An extra lamp is carried in a compartment under the textolite plate on the right hand side of the stock. One side of the electric circuit is grounded to the tube of the launcher, while the other is connected to an insulated spring-actuated contact housed in a box on top of the launcher tube about 4 inches to the rear of the stock. The tail of the contact arm projects from the rear of the box and has two positions, marked respectively "fire" and "safe." Use the "safe" position while loading. When the launcher is fired, the contact arm automatically returns to "safe."

b. Rockets. - (1) ROCKET, AT, 2.36-in., M6 (formerly designated ROCKET, AT, T1) is shown in figure 1. The propelling charge is loaded in the tube connecting the high explosive head with the guiding fins. To protect the charge against moisture and dirt, the opening of the nozzle is sealed with a cardboard disk. The rocket has an insulated brass contact ring on the ogive which forms one contact for the igniter. The other contact is made at the unpainted notches in the tail fins. Insulated wires soldered to the brass contact ring and to the tail are taped to the body of the rocket and pass through the nozzle to the electric igniter. The fuze mechanism consists of a simple spring-restrained, weighted striker which is held in the "safe" position by a safety pin which passes through it and encircles the tube of the rocket immediately behind the high explosive head. The rocket is painted yellow with black markings.

(2) ROCKET, practice, AT, 2.36-in., M7 (formerly designated ROCKET, practice, AT, T2) is identical in weight and external appearance to ROCKET, AT, 2.36-in., M6, but it contains no high explosive charge. It is painted black with white markings.

4. OPERATION. - a. Before firing. - For rapid fire two men work together in using the launcher. It may be fired from the shoulder in the standing, kneeling, sitting, or prone positions, and there is no recoil. Operation is as follows:

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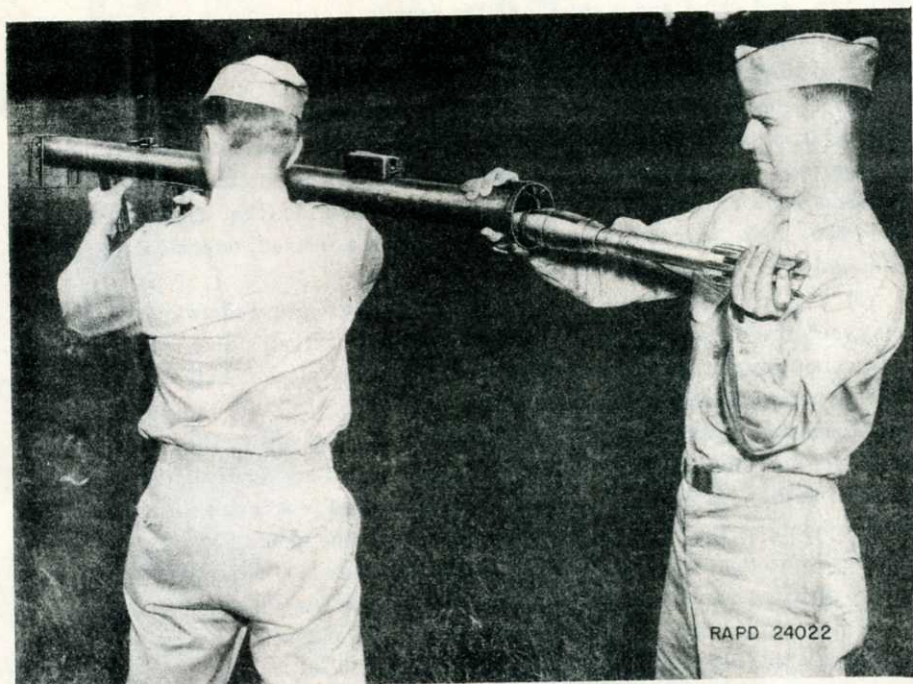


FIGURE 3 - LOADING A ROCKET INTO THE LAUNCHER

(1) The firer places the launcher on his shoulder and tests the electric circuit by squeezing the trigger several times, observing operation of the electric indicator lamp.

(2) The loader, who should at no time stand directly behind the launcher, sets the tail of the electric contact to the "safe" position.

(3) The loader then grasps the rocket by the tail and inserts the high explosive head into the launcher tube, at the same time raising the tail latch clear of the tube.

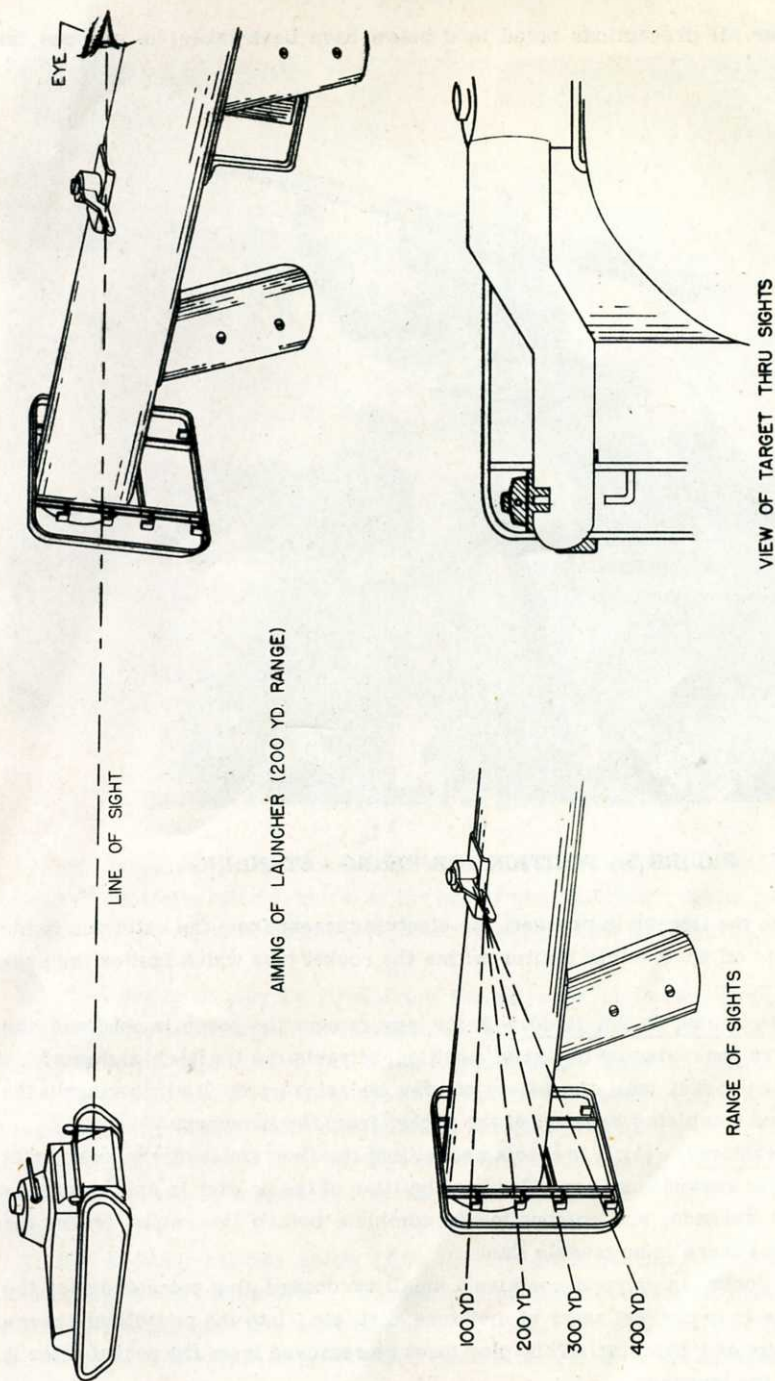
(4) Having inserted the head of the rocket, he releases the tail latch, removes the safety pin from the fuze and pulls out the tail plug.

(5) He then again retracts the tail latch and carefully pushes the rocket home until the notches in the tail fins engage the tail latch.

(6) Then the loader moves up beside the firer, raises the tail of the electric contact to firing position, and reports the piece ready to fire.

b. During firing. - (1) The firer estimates the distance to the target and picks the proper stud on the front sight for use in aiming. The four studs are for 100-, 200-, 300-, and 400-yard ranges.

(2) The firer sights at the target through the hinged rear sight, centering the stud in the notch of the sight (fig. 4), and estimates the lead and windage.



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FIGURE 4 - AIMING THE LAUNCHER

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(3) After all precautions noted in d below have been taken, he presses the trigger.



FIGURE 5 - POSITION FOR FIRING - STANDING

(4) When the trigger is pressed, the electric current from the batteries in the launcher sets off an electric igniter within the rocket tube which ignites the propelling charge.

c. If the rocket is not fired. - If for any reason the piece is not fired, the loader returns the contactor to "safe" position, retracts the fin latch, and carefully withdraws the rocket until the safety pin can be reinserted. He then inserts the safety pin and completes removal of the rocket from the launcher.

d. Precautions. - (1) It is recommended that the firer and loader wear helmets when using the rocket launcher. The burning time of the powder is approximately 0.02 to 0.03 seconds, and combustion is complete before the rocket leaves the muzzle, hence there is no muzzle flash.

(2) The rocket as shipped contains a small cardboard plug cemented over the nozzle. This is to prevent entry of moisture, dirt, etc., into the propellant charge during storage and handling. This plug must be removed from the rocket after it is placed in the launcher.

LAUNCHER, ROCKET, AT, M1



FIGURE 6 - POSITION FOR FIRING - KNEELING

(3) Since the fuze of the rocket is quite sensitive, it is important that the rocket be handled carefully after removal of the safety pin, and that it not be dropped. A fall, of 48 inches or more on its nose, after removal of the safety wire, will cause detonation.

(4) The launcher may be fired from the shoulder in the standing, kneeling, sitting, or prone positions. If fired prone, the body should be at an angle of at least 45 degrees to the direction of fire so as to avoid injury from the back blast of the rocket. In using this device it is essential that no personnel or inflammable materiel be directly behind the rocket within a distance of 20 feet.

(5) When the launcher is fired, the contact arm automatically returns to "safe," but this action should be checked by the loader before starting to load a second round.

(6) At temperatures below 14 F, the dry cells become too weak to fire this weapon. When used at low temperatures, the batteries should be removed from the launcher and kept warm until just before firing. When fired from trenches or foxholes, clearance should be provided so that the back blast is not deflected against personnel.

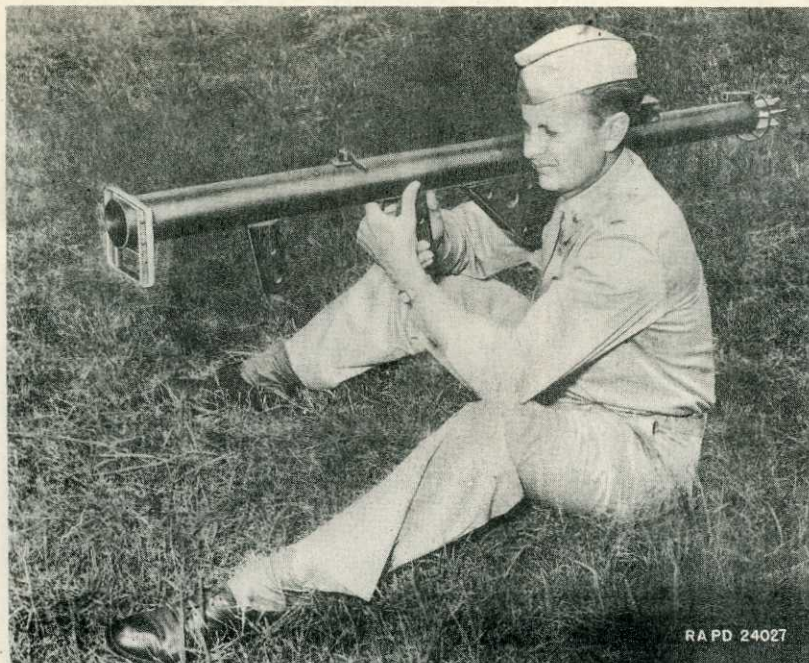


FIGURE 7 - POSITION FOR FIRING - SITTING



FIGURE 8 - POSITION FOR FIRING - PRONE

LAUNCHER, ROCKET, AT, M1

5. **PACKING AND STORAGE OF ROCKETS.** - a. Packing. - (1) The rockets are packed in individual fiber containers, each sealed with a strip of adhesive tape bearing the model designation. Twenty rockets in fiber containers are packed in a wooden packing box (fig. 9), total weight approximately 136 pounds.

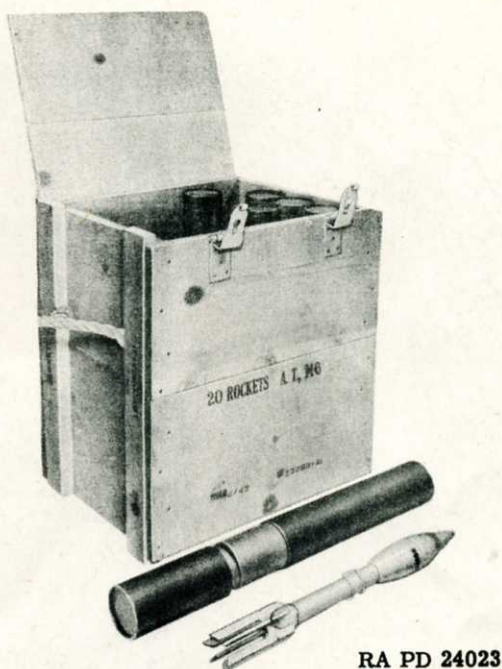


FIGURE 9 - PACKING OF ROCKET, AT, M6

(2) Rockets which have been unpacked but not fired should be returned to their original packing containers. Make certain that the safety pin is in place and the cardboard disk placed over the nozzle. The fiber container should be sealed again with adhesive tape.

b. Storage. - The rockets should be stored alone in a cool dry place. They should not be stored where temperatures exceed 120 F and they should not be exposed to the direct rays of the sun.

6. This bulletin is effective until the above information can be included in appropriate Field and Technical Manuals.

By order of the Chief of Ordnance:

(O.O. 300.5/1196)

H. R. KUTZ,
Brig. Gen., Ord. Dept.,
Chief of Field Service.