

Changes in force: C2 and C3

FM 23-11
C3

Change }
No. 3 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D. C., 28 April 1970

90-MM RECOILLESS RIFLE, M67

FM 23-11, 6 July 1965, is changed as follows:

Page 4. Paragraph 3 a (6) (as changed by C2) is superseded as follows:

(6) Maximum effective range:

HEAT, TP 400 meters
Antipersonnel. 300 meters

Page 4, paragraph 3b. A column for "antipersonnel" is added as follows:

- (1) APERS.
- (2) 6.79 pounds.
- (3) 3.97 pounds.
- (4) 1250 feet per second.

Page 6, paragraph 8b (1) (c). In line 2, "clockwise" is changed to read "counterclockwise."

Page 16. Paragraph 20 is superseded as follows:

20. Classification

There are three authorized rounds for the 90-mm recoilless rifle, M67. These are TP M371, HEAT M371E1, and 90-mm canister, XM590E1. The target practice (TP) round is not standard, but it is available for issue in certain areas. It is ballistically identical to the high explosive antitank (HEAT) round but contains only a small spotting charge as the projectile filler. The 90-mm canister round, XM590E1, is a fixed type antipersonnel round which functions at muzzle action.

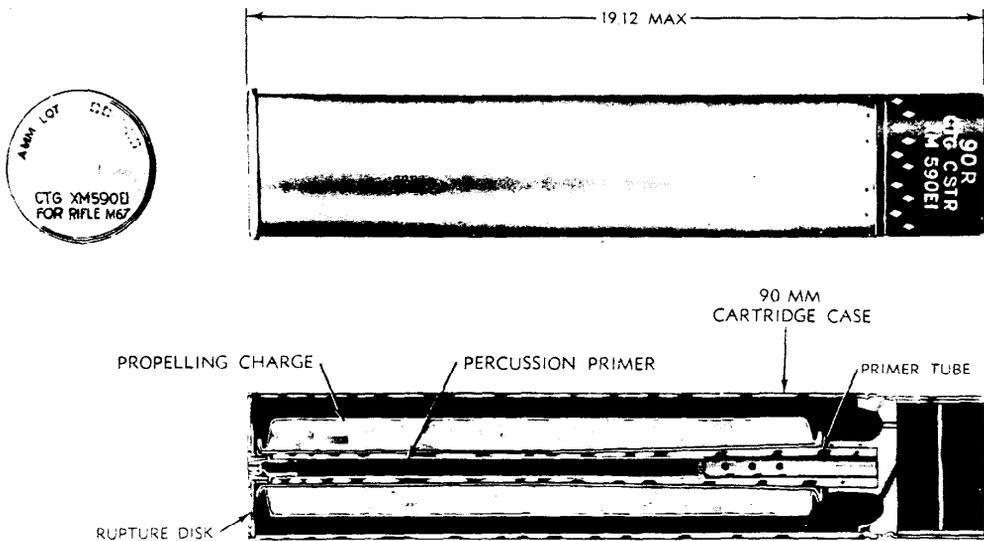


Figure 15.1. 90-mm canister cartridge XM590E1.

Page 17. Paragraph 21.1 is added after paragraph 21.

21.1 90-mm Canister, Antipersonnel, XM590E1

a. The 90-mm canister, antipersonnel round is designed for close-in defense against massed attacks or assaults on personnel positions. The canister consists of a thin-walled, deep-drawn, scored aluminum body which contains a payload of 2400 eight-grain, low-drag, fin-stabilized, steel-wire fragments called flechettes. The complete cartridge weighs approximately 6.79 pounds. The projectile weighs approximately 3.97 pounds and has a muzzle velocity of approximately 1250 feet per second.

b. The aluminum cartridge case (M112) is 16.29 inches long and weighs 1.0 pounds. A flange at the base contains a plastic rupture disc that obstructs the gas flow during the early stages of propellant combustion. When the propellant is ignited, the rotating band on the base traps the propellant gases, building up an internal pressure which bleeds through the holes in the base. The built-up pressure bursts the body with the payload from

the case when the canister leaves the rifle. The scored aluminum body strips back and the eight-grain flechettes are released, dispersing in a cone angle of approximately 8 degrees.

Warning: Overhead firing is prohibited.

Page 17, paragraph 22b. In line 5, "(lucky element)" is deleted.

Page 20, paragraph 28. In line 2, "radiological" is changed to read "nuclear."

Page 20, paragraph 29c. In line 2, "radiological" is changed to read "nuclear."

Page 46. Paragraph 69 c (1) (c) (as superseded by C2) is superseded as follows:

(c) Zero the rifle at a known range between 350 and 400 meters, or use a distance which is 80 percent of the most distant target.

Page 46. Paragraph 69 d (1) (c) is superseded as follows:

(c) Zero the rifle at a known range between 350 and 400 meters, or use a distance which is 80 percent of the most distant target.

Page 53, paragraph 76 g. In line 2, "except when firing at a moving target" is deleted.

Page 53, paragraph 77 c. In line 2, "or antipersonnel" is added after "TP".

By Order of the Secretary of the Army:

Official:

KENNETH G. WICKHAM,
*Major General, United States Army,
The Adjutant General.*

W.C. WESTMORELAND,
*General, United States Army,
Chief of Staff*

Distribution:

To be distributed in accordance with DA Form 12-11 requirements for 90-MM Recoilless Rifle, M67.