

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

OPERATOR INFORMATION FOR CARTRIDGE, 40MM: MULTIPURPOSE, XM1060, FOR 40MM M203 GRENADE LAUNCHER

Headquarters, Department of the Army
15 APRIL 2003

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	Page
SECTION I INTRODUCTION	2
1. Purpose	2
SECTION II DESCRIPTION	2
2. General	2
3. Description	2
SECTION III SAFETY CONSIDERATIONS	3
4. Precautions and Recommendations	3
5. Aiming Instructions	3
SECTION IV DATA	4

SECTION I INTRODUCTION

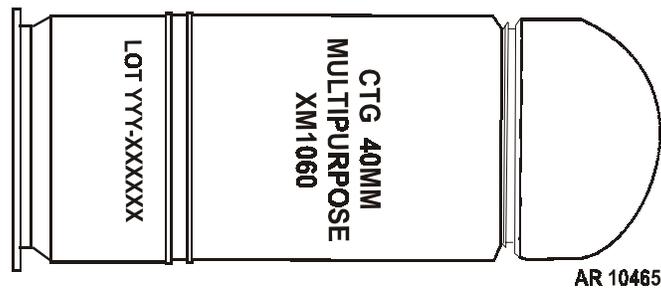
1. PURPOSE.

This bulletin provides operator maintenance level information for Cartridge, 40mm: Multipurpose, XM1060, for 40mm M203 Grenade Launcher. This bulletin is for use by M203 gunners using this cartridge. This is a stand alone document. Data presented in this bulletin will not be incorporated into any of the ammunition and weapon technical manuals.

SECTION II DESCRIPTION

2. GENERAL.

Nomenclature: Cartridge, 40mm: Multipurpose, XM1060.



3. DESCRIPTION.

a. The XM1060 has been developed by ARDEC at the request of the Program Executive Office - Soldier. Cartridge, 40mm: Multipurpose, XM1060 is used against personnel in enclosed confines, such as caves. The lethality effect is from an overpressure blast rather than fragmentation. It is fired from the 40mm M203 Grenade Launcher.

b. The XM1060 is a fixed round of ammunition with an aluminum projectile and two-chamber cartridge case assembly. The 40mm multipurpose cartridge is of similar proportions to the standard 40mm illuminant cartridge. There is no hole in the projectile base where propellant gases would ignite the illuminant since it contains a Point Initiating Base Detonating (PIBD) fuze and is filled with High Explosive (HE).

SECTION III SAFETY CONSIDERATIONS

WARNING

Do not fire while in the same enclosed area as the target to prevent being overcome by the overpressure blast. If the target is in a building or other type enclosure, the gunner and all personnel must be a minimum of 75 feet (25 m) from the edge of the building or enclosure.

Fire from a protected position.

Fire from an open, well ventilated area to prevent toxic fume buildup.

Do not engage targets closer than 101 feet (31 m).

Do not touch a dud! Mark the spot and call EOD.

Wear approved single hearing protection within 1680 feet (512 m) of the firing point.

The gunner and all personnel within 101 feet (31 m) of point of impact must wear body armor, helmet and goggles.

The standard misfire procedures for the M203 grenade launcher must be followed.

The standard surface danger zone for the 40mm HE ammunition for the M203 grenade launcher must be followed.

4. PRECAUTIONS AND RECOMMENDATIONS.

- a. The XM1060 cartridges should be stored as other 40mm HE low velocity ammunition.
- b. Segregate the 40mm XM1060 multipurpose cartridges from the 40mm signal cartridges, such as the M583A1, which are packed in the same type of containers and have a similar body. This will prevent incorrect usage.

5. AIMING INSTRUCTIONS.

- a. Aiming the XM1060 is similar to aiming the M433. These cartridges fire shorter than standard 40mm ammunition. Muzzle velocity variations result in minor corrections as indicated below.
- b. Range estimation is considered to contain the greatest margin of error. If the range can be accurately determined (e.g., laser range finder), refer to the following:

<u>SIGHT</u>	<u>ACTUAL IMPACT RANGE</u>
250 m	212 m
150 m	139 m
100 m	94 m
50 m	54 m

- c. If the range cannot be accurately determined, refer to the following:

- Target ranges up to 100 meters, use the leaf sight.
- Target ranges over 100 meters, add 10 meters per 100 meters (e.g., if range is 200 meters, aim to 220 meters).

SECTION IV DATA

TABULATED DATA.

Complete Round:
 Type Multipurpose
 Weight 265 g (0.584 lb)
 Length 4.95 in. max.
 Weapons used with 40mm M203

Projectile:
 Body material..... Aluminum
 Weight 224 g max.
 Length 3.92 in. max.
 Color Olive drab w/yellow markings
 Explosive filler and weight YJ05, 115 g
 Booster charge and weight..... PBXN5, 5 g

Ogive:
 Color Yellow/gold
 Fuze..... PIBD, M550
 Spitback charge..... Comp CH-6

Propelling Charge:
 Cartridge case M195
 Propellant and weight M9, 345 mg
 Primer M42, FED 100

PERFORMANCE:

Velocity..... 211 fps
 Maximum Effective Range:
 Point target 150 m
 Area target 250 m

TEMPERATURE LIMITS:

Firing:
 Lower limit -50°F
 Upper limit..... +125°F

Storage:
 Lower limit -65°F
 Upper limit..... +165°F

DRAWINGS:

Cartridge ARDEC-SMK-030006
 Packing..... 9209205

UNIT OF ISSUE:

Packing..... 22 rounds in metal container; 2 containers per wirebound box

*PACKING DATA:

Packing Box:
 Weight 50 lb
 Dimensions..... 14-5/8 x 12-13/16 x 9-1/8 in.
 Cube 1.0 cu ft

*NOTE: See DOD Consolidated Ammunition Catalog for complete packing data including NSNs.

SHIPPING AND STORAGE DATA:

NSN 1310-01-506-1971
 UNO serial number..... 0006
 Hazard class/division and storage compatibility group..... 1.1E
 DODAC 1310-BA19
 DOT marking..... CARTRIDGES FOR WEAPONS

By Order of the Secretary of the Army:

Official:



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0310008

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