105MM M456A2 (HEAT-T) TANK AMMUNITION

**Purpose:** This cartridge is a high explosive antitank cartridge and is intended for use in 105mm guns against armored targets. It has a dual role capability in killing dismounted infantry by blast and fragmentation and in destroying lightly armored and nonarmored vehicles and bunkers.

**Description:** The steel body projectile is fitted with a plastic obturator, a threaded standoff spike assembly, a fin and boom, and a PIBD fuze. A funnel-shaped copper liner within the body shapes the explosive charge of Comp B. A piezoelectric element retained in a nose cap is fitted to the spike assembly and is connected to the BD fuze in the body. The fin is threaded to receive a tracer.

**Operation:** The electrically initiated primer ignites the propelling charge. Gases produced by the burning propellant propel the projectile from the gun and ignite the tracer, which burns for a minimum of 2.5 seconds. On impact, fuze functioning detonates the projectile and cone collapses, creating a high-velocity focused shock wave and a jet of metal particles that penetrates the target.

**Difference Among Models:** The two models in the M456 series differ in the use of an impact switch assembly. The addition of the impact switch assembly provides for a higher functioning reliability in that initiation can occur upon contact with any part of the standoff spike assembly, i.e., improved performance on irregular surfaces and graze functioning.
**105MM (HEAT-T)
TANK AMMUNITION**

**TYPE CLASSIFICATION:**
STD AMCTC 4677 dtd 1966 OBS MSR 11756003

**CHARACTERISTICS:**
Complete round:
Type ____________________ HEAT-T
Weight __________________ 49 lb (22.2kg)
Length __________________ 39.6 in (1005.8 mm)
Cannon used with ________ M68 and L7

**Projectile:**
Body material ______________ Steel
Color ________________ Black w/yellow markings
Filler and weight __________ Comp B 2.14lbs.

**Components:**
Cartridge case ____________ M148A1B1
Propellant ________________ M30
Primer __________________ M83
Tracer ________________ M13
Fuze ________________ PIBD-M509A1

**Performance**
Muzzle velocity____________ 1173 mps (3850 fps)
Maximum range __________ 8200 m (8975 yd)

**TEMPERATURE LIMITS:**
Firing:
Lower limit ______________ -40˚F (-40˚C)
Upper limit ______________ +125˚F (+52.0˚C)
Storage:
Lower limit ______________ -65˚F (-53.8˚C)
Upper limit ______________ +145˚F (+63˚C)

**PACKING:**
1 round per fiber container; 2 containers per wooden box
Packing Box:
Weight __________________ 141 lb (64 kg)
Dimensions ____________ 45 13/16 x 13 15/16 x 8 7/16
(1163.6 x 354.0 x 214.3 mm)
Cube ____________ 3.1 cu ft (10.2cu.m.)
Drawing ____________ 9312816

**SHIPPING & STORAGE DATA:**
Storage Class/SCG ________ (12) 1.2E
DOT shipping class ________ A
DOT designation __________ AMMUNITION FOR CANNON
WITH EXPLOSIVE PROJECTILES
DODAC ____________ 1315-C508

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**GENERAL DYNAMICS**
Ordinance and Tactical Systems

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