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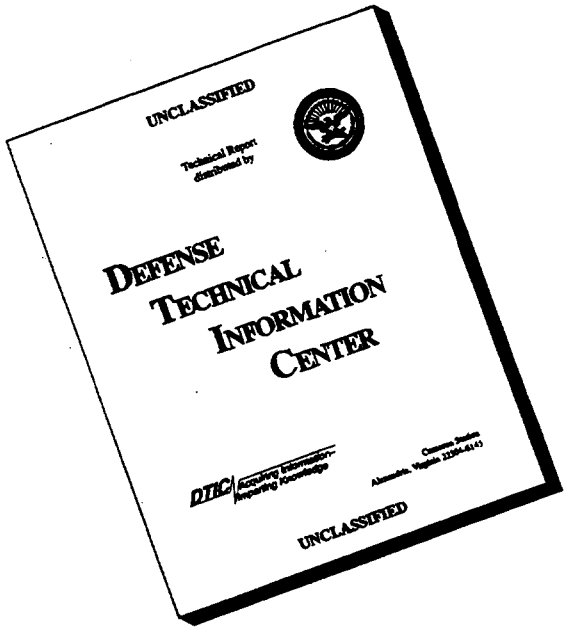
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DRAFT EQUIPMENT PUBLICATION FOR PROJECTILE, 155mm: HE, XM795 CONTAINING SUPPLEMENTAL DATA FOR TM 9-2350-303-10 TM 9-2350-217-10N TM 9-1025-211-10 TM 9-1025-200-12 TM 43-0001-28 TM 9-1300-251-20 TM 9-1300-251-34

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PREPARED BY:
HEADQUARTERS, US ARMY ARMAMENT MATERIEL READINESS COMMAND
DOVER, NEW JERSEY 07801

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No. 9-1320-535-14)

HEADQUARTERS
U. S. ARMY ARMAMENT MATERIEL
READINESS COMMAND
Rock Island, Illinois, February 1979

DRAFT EQUIPMENT PUBLICATION FOR PROJECTILE, 155MM: HE, XM795 CONTAINING SUPPLEMENTAL DATA FOR TM 9-2350-303-10 TM 9-2350-217-10N TM 9-1025-211-10 TM 9-1025-200-12 TM 43-0001-28 TM 9-1300-251-20 TM 9-1300-251-34

REPORTING OF ERRORS

The reporting of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Your letter or DA Form 2028, Recommended Changes to Publications and Blank Forms, should be mailed directly to Commander, U. S. Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS-MA, Dover, New Jersey 07801. A reply will be furnished directly to you.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. PURPOSE

The contents of this publication provide data necessary for the Development Test and Operational Test (DT/OT II). The pages indicated by parenthetical brackets on each page reflect required changes to the following publications:

a. TM 9-2350-303-10 — (Chapter 4) Operator's Manual Howitzer, Medium self propelled: 155mm, M109A2.

b. TM 9-2350-217-10N — (Chapter 4) Operator's Manual, Howitzers Medium Self Propelled 155mm, M109, M109A1.

c. TM 9-1025-211-10 — (Chapter 4) Operator's Manual, Howitzer Medium, Towed, M198.

d. TM 9-1025-200-12 — (Chapter 6) Operator's Manual (Howitzer, Medium Towed M114A2.

e. TM 9-1300-251-20 — Organizational Maintenance Manual (Including Repair Parts and Special Tools Lists): Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launcher.

f. TM 9-1300-251-34 — Direct Support and General Support Maintenance (Including Repair Parts and Special Tools Lists): Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launchers.

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g. TM 43-0001-28 — Army Ammunition Data Sheet. Artillery Ammunition Guns, Howitzers, Mortars, Recoilless Rifles, Grenade Launchers and Artillery Fuzes.

NOTE

Draft input reflects material to be inserted directly into the applicable publications on the appropriate pages. Changes will be indicated by double bars in the margin of the page.

1-2. SCOPE

a. General. The information in this publication is provided to aid in test, operation and maintenance during the development and engineering test phases of the 155mm HE, XM795 projectile. This publication is prepared as a supplemental instruction to the publications listed in Chapter 2.

b. Data Provided. The data provided contains physical and functional description of the projectile and instructions for its use, care and handling.

c. Instructions. These instructions are for use by operator/crew and by organizational, Direct Support (DS) and General Support (GS) Maintenance Personnel.

1-3. FORMS, RECORDS AND REPORTS

Department of the Army Maintenance forms and reporting procedures are prescribed in TM 38-750, The Army Maintenance Management System (TAMMS).

a. Report of Damaged or Improper Shipment. Damaged or improper shipments will be reported immediately using DD Form 6 (Report of Packaging and Handling Deficiencies) AR 700-58 and/or SF 361 (Discrepency in Shipment Report) AR 55-38.

b. Fire Reports. As prescribed by AR 385-12, DA Form 3985 will be used to report fires or explosions followed by fire. DA Form 3985 will be submitted in addition to the accident reports required by AR 385-40.

c. Field Report of Accidents. Accidents involving injury to personnel or damage to materiel are reported on DA Form 385 or DA Form 1051 in accordance with instructions in AR 385-40.

d. Malfunction Reports.

(1) Definition of malfunction. A malfunction is a failure of the item to perform as expected when fired or subjected to tests. For reporting purposes, malfunctions do not include accidents and fires resulting from negligence, malpractice, and the like. However, the malfunctions do include abnormal or premature functionings which occur in the course of handling, maintenance, storage, transportation and tactical deployment.

(a) Malfunctions involving developmental ammunition. Reports of malfunctions involving the items covered by this publication will be forwarded to the Commander, USA Armament Materiel Readiness Command, ATTN: DRSAR-MAD-C Dover, New Jersey 07801. The contents of the reports will conform to the requirements in AR 75-1.

(b) Malfunctions involving standard issue ammunition. Malfunctions

involving projectiles, primers and fuzes used with these propelling charges will be reported in accordance with AR 75-1. This procedure will be followed in reporting malfunctions which occur during training and combat missions; research development and test phases; and during tests (Including comparison, safety, climatic, reliability, etc.) conducted subsequent to the acceptance test.

Section II. SAFETY, CARE, AND HANDLING

1-4. PRECAUTIONS

a. Safety precautions for the handling and firing of artillery ammunition as prescribed in TM 9-1300-206, TM 9-1900, and AR 385-63 are applicable.

b. Observe the general ammunition limits for storage and firing.

1-5. SAFETY

This ammunition is normally safe to handle and fire. Hazardous conditions can arise, and should be handled as indicated in TM 9-1350-303-10, TM 9-2350-217-10N, TM 9-1025-211-10, and TM 9-1025-200-12 to avoid injury to personnel and damage to equipment.

CHAPTER 2

OPERATIONAL AND MAINTENANCE INSTRUCTIONS

2-1. GENERAL

The information on 155mm Ammunition contained in the following four chapters is written in the form of Draft Input Revisions/Changes to the weapon system and ammunition technical manuals. The ammunition covered includes all conventional and ICM ammunition which can be used in the following howitzers.

a. Self Propelled M109 with the M126 Cannon.

b. Self Propelled M109A1 and M109A2 with the M185 Cannon.

c. Towed M198 with the M199 Cannon.

d. Towed M114A2 with the M1A2 Cannon.

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CHAPTER 3

SUPPLEMENTAL INPUT DATA TO AMMUNITION CHAPTERS OF TM 9-2350-303-10; TM 9-2350-217-10N; TM 9-1025-211-10; TM 9-1025-200-12.

Section I. GENERAL INFORMATION

3-1. GENERAL

a. Ammunition for your 155mm howitzer cannon is the separate-loading type. The loading of each complete round into the howitzer cannon requires three separate operations: loading the fuzed projectile, the propelling charge, and the primer. These components are shipped separately. The preparation and loading of a complete round is normally performed by loader and supervised by the gun commander. However all loaders and drivers should be cross-trained in the care, handling and preparation and loading of ammunition to sustain 24 hour operation and/or operating with reduced crews.

b. Projectile colorings and markings (new and old) are listed in table 3-1. Additionally, important information is stenciled on each projectile (see below). Knowledge of the color coding and the meaning of the markings will aid in the rapid selection of the required projectile when firing. KNOW YOUR AMMUNITION.

MARKING OF 155MM HE PROJECTILE

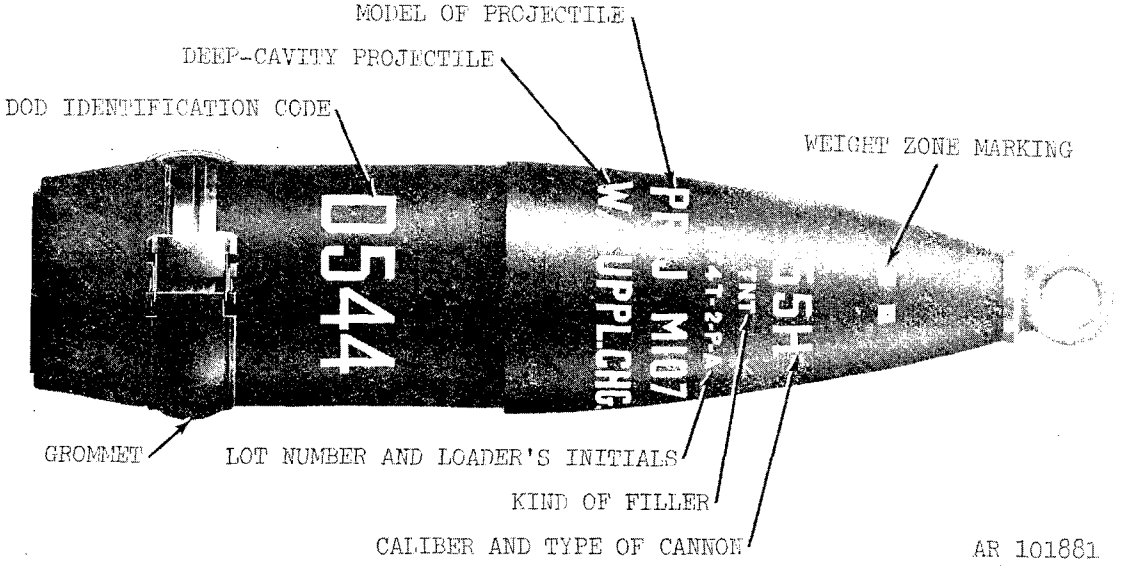


Table 3-1. Model Numbers and Color Coding of Projectiles for Howitzer

Type and Model Number of Projectile	NEW MANUFACTURE			OLD MANUFACTURE		
	Color of Projectile	No/Color of bands	Marking	Color of Projectile	No/Color of Bands	Markings
Agent (H, HD) w/burster, M110	Gray	2/Green 1/Yellow	Green	Gray	2/Green	Green
Agent (GB) w/ burster, M121A1,	Gray	3/Green 1/Yellow	Green	Gray	1/Green	Green
Agent (VX) w/ burster, M121A1	Gray	3/Green 1/Yellow	Green	Gray	2/Green	Green
HE, M449 Series series M483A1	Olive Drab	*Diamonds	Yellow	Olive Drab	None	Yellow
HE, M107, Comp B & TNT filler w/ & w/o Suppl Charge	Olive Drab	None	Yellow	Olive Drab	None	Yellow
HE, XM795 TNT Filler HE	Olive drab	None	Yellow	N/A		
ILLUMINATION M485A1, M485A2	Olive Drab	1/White	White	NOT APPLICABLE		
Smoke Base Ejection (HC & Colored) M116, M116B1 (M116E1)	Light Green	None	Black	Gray	1/Yellow	Yellow
M116A1	LIGHT GREEN	NONE	BLACK	NOT APPLICABLE		
Smoke (WP) M110 (M110E1), M110A1, (M110E2) M110A2 (M110E3)	Light Green	1/Yellow	Red	Gray	1/Yellow	Yellow
HE, RAP, M549 M549A1	Olive Drab	--	Yellow	--	NOT APPLICABLE	
HE, ** M692, M731(ADAM)	Olive Drab	***Triangles	Yellow	NOT APPLICABLE		

*Row of yellow diamonds between nose and bourrelet of projectile.

**ADAM--Area Denial Artillery Munition.

***Yellow triangles between the nose and bourrelet of the projectile with figures of S, or L painted inside the triangle.

c. Authorized Rounds.

WARNING

Unauthorized assembly and use of projectiles and propelling charges are extremely dangerous. Make sure projectiles are marked 155H (not G).

(1) Projectile-fuze combinations for authorized rounds are given in table 3-2.

(2) Projectiles of current manufacture, which contain deep fuze cavities and supplementary charges of TNT, are suitable for use with the long intrusion (M728) or the new short intrusion (M732) proximity fuzes. The only difference is that the supplementary charge must be removed when the older long intrusion proximity fuze is used... it must remain in place whenever any other authorized fuze, to include the new short intrusion proximity fuze is used. Deep cavity projectiles are identified by the words W/SUPPL CHG marked on the projectile. Weight zones are indicated on projectile by means of one or more squares of the same color as the marking. Four squares indicate standard or normal weight for which no weight corrections are necessary when computing firing data. The XM795 Projectile does not contain a supplementary charge.

d. Detailed descriptions of authorized projectiles, fuzes and propelling charges follow in Sections II - IV of this chapter.

Section II. PROJECTILES

3-2. AUTHORIZED PROJECTILES AND THEIR CHARACTERISTICS.

a. PROJECTILE, 155 MILLIMETER: HE, M107. Used principally for blast, fragmentation, and mining. This deep or shallow cavity projectile consists of a steel case loaded with either TNT or Comp. B PD, time, or proximity fuze may be used. The M107 projectile weights approximately 95 lbs.

b. PROJECTILE, 155 MILLIMETER: HE XM795.

(1) DESCRIPTION. The configuration of the XM795 projectile will be similar to the M483A1 externally, except that it is two inches shorter. The XM795 projectile consists of 23.8 pounds of TNT explosive loaded into a 78.1 pound body assembly. A gilding metal rotating band encircles the high fragmentation steel HF-1 body near its base. The obturator is plastic. The base is protected by a carbon steel base plate. The projectile is fitted with a protective lifting plug at the nose and a grommet which protects the rotating band during shipping and handling. The projectile uses impact, electrical time, mechanical time, and short intrusion proximity fuzes. The XM795 projectile has no supplementary charge. This projectile also has the new type lifting plug designed to protect the projectile nose area against accidental damage. The new plug has an oversized (3 3/4 in.) flange. If this protective lifting plug is broken at the neck area, the threaded portion will remain in the projectile and the projectile cannot be fuzed. No attempt should be made to extract any portion of a broken plug from the projectile. The projectile is not to be used and should be returned to the supply point.

(2) FUNCTIONING. When the weapon is fired, the rotating band engages the barrel rifling to impart spin to the projectile for stability in flight. The obturator of the rotating band forms a seal to prevent leakage of of gas pressure past the projectile. Rapidly expanding gases from the burning propellant charge propel the projectile through the barrel with the velocity necessary to reach the target. At the target, the warhead filler is detonated by the fuze. The fuze mode can be either impact, preset time, or proximity depending on fuze selection.

c. PROJECTILE, 155 MILLIMETER: GAS, PERSISTENT, H or HD, M110. This projectile produces a toxic effect on personnel and is also used to contaminate habitable areas. This 98 lb. projectile is filled with H or HD gas with a built-in burster charge.

d. PROJECTILE, 155 MILLIMETER: GAS, PERSISTENT, VX, M121A1. VX gas projectiles produce a toxic effect on personnel. A burster charge breaks the projectile apart. This projectile weighs approximately 100 lbs.

e. PROJECTILE, M155 MILLIMETER: GAS, NON-PERSISTENT, GB, M121A1. This projectile is similar to the VX projectile M121A1 described above. When required for contingency plan purposes, VX or GB filled projectiles M121A1 may be transported fully assembled with explosive components, otherwise assembly is prohibited except for storage and use.

WARNING

The burster in Projectile WP, M110E1 and M110 is loaded with tetrytol, do not store or fire at temperatures exceeding +125°F. Temperatures above +125°F will cause the tetrytol to melt and/or exude, causing premature functioning. Prior to firing inspect fuze well cup for dents in bottom surface. If dents are found and/or fuze is hard to seat, do not use round.

f. PROJECTILE, 155 MILLIMETER: SMOKE, WP, M110E1 and M110 WP. Smoke projectiles M110 and M110E1 have a slight burning effect, but are used primarily to produce screening smoke. The projectile is similar to the M110 gas projectile and has the same characteristics as the M107 HE. It weights approximately 98 pounds.

g. PROJECTILE, 155 MILLIMETER: SMOKE, WP, M110A1 (M110E2) and M110A2 (M110E3). This projectile is similar to WP projectiles M110 and M110E1 except that there is no tetrytol in the burster. This projectile may be stored and transported at temperatures up to +145°F. Inspection of the fuze well cup is required before firing.

h. PROJECTILE, 155 MILLIMETER: SMOKE, BE, M116, M116B1 (M116E1). The BE smoke projectile M116 is used for screening, spotting, and signaling purposes and is issued with a filler of either HC (White) or green, red, violet, or yellow chemical smoke mixture. This is a base ejection type round and contains four smoke canisters. It weight approximately 86 lbs.

The M116A1 Projectile is a base ejection type similar to the M116 and M116B1 with the exception that it uses the M565 MT and M577 MTSQ Fuzes, and that it has improved M1 and M2 HC (white) smoke canisters.

i. PROJECTILE, 155 MILLIMETER: ILLUMINATING, M485A1, AND M485A2. This projectile is used for battlefield illumination. The projectile has a hollow steel body containing a primary expelling charge, a canister assembly, and a drogue parachute. The canister assembly contains a secondary expelling charge, a delay holder, a light producing chemical, and the main parachute.

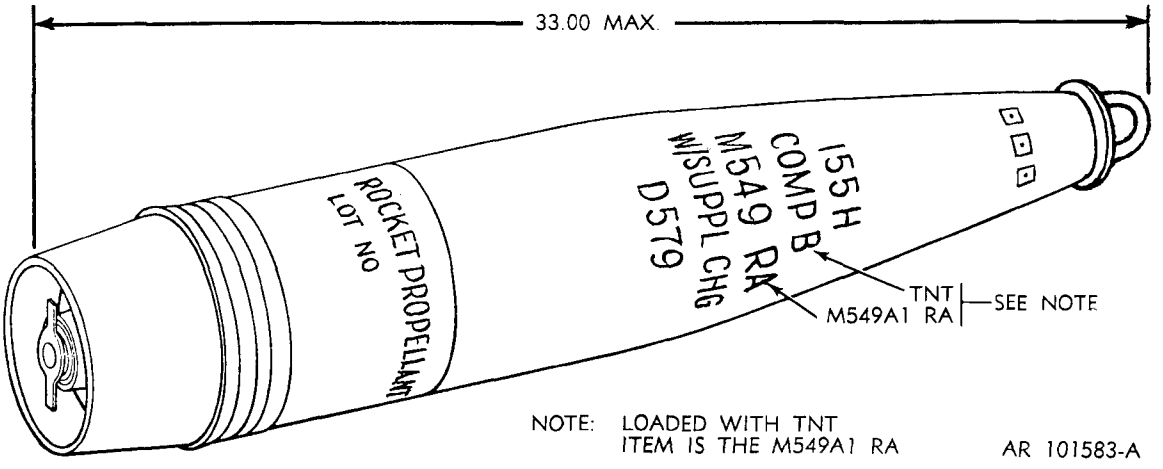
WARNING

The M485A1 and M485A2 projectiles can be fired with zones 2 through 7 inclusive. Projectiles M485A1 and M485A2 are not reliable when fired at zones 6, 7 and 8 with fuze settings of 10 seconds or less.

j. PROJECTILE, 155 MILLIMETER HIGH EXPLOSIVE, ROCKET ASSIST M549/M549A1. This is a high fragmentation projectile containing a rocket motor. The protective rocket motor cap is removed from the projectile before firing to increase the range over that attainable ballistically. The M549 differs from the M549A1 only in the type of explosive filler. The M549 is loaded with composisition B and is restricted from use with the M203 Zone 8S propelling charge. The M549A1 is loaded with TNT and may be used with the M203 Zone 8S charge.

The M549/M549A1 projectiles have the energy-absorbing lifting plug designed to protect the projectile fuze area against accidental damage. The new plug has a oversized (3-3/4") flange. If this lifting plug is broken at the neck area, the threaded portion of the plug will remain in the projectile and the projectile cannot be fuzed. No attempt should be made to extract any portion of the broken plug from a projectile; the projectile is not to be used and must be returned to Supply Point.

PROJECTIIE , 155MM: HERA M549



WARNING

The M549/M549A1 cannot be fired in the rocket off mode. The rocket motor off cap must be removed prior to firing. The M549/M549A1 cannot be fired if the obturator is missing or broken; short rounds may occur.

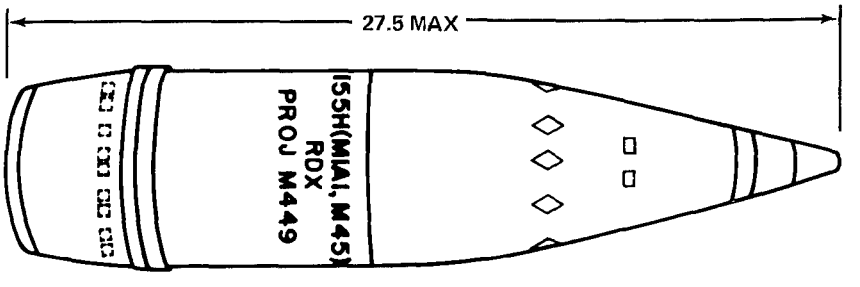
The use of the M119 charge with the M549/M549A1 is restricted to combat emergency use only. There is no restriction on the M119A1 charge . Use of the M119 charge will result in rocket motor ignition failures causing loss of range (short rounds).

WARNING

A 6,000 meter safety zone is required short of the target because of the possibility of rocket motor non-ignition.

k. PROJECTILE, 155 MILLIMETER IMPROVED CONVENTIONAL MUNITIONS (ICM) M449 SERIES. These projectiles are Improved Conventional Munitions used primarily against personnel. They are base ejecting projectiles and contain 60 M43 Series grenade submissiles. The grenades are dispersed in the air when the time fuze functions. When the grenades impact in the target area, submunitions are ejected and explode 4 to 6 feet above the surface producing fragmentation in a circular pattern. The projectile weighs approximately 95 lbs and uses the M565 MT or M577 MTSQ time fuzes.

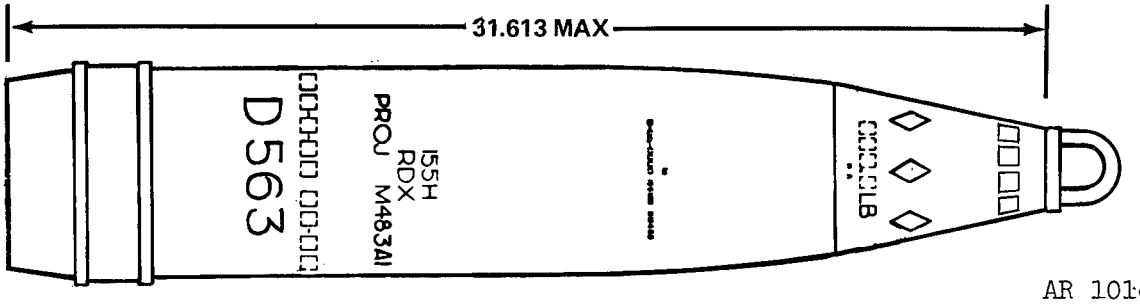
M449 ICM SERIES



AR199430

1. PROJECTILE, 155 MILLIMETER IMPROVED CONVENTIONAL MUNITIONS (ICM) M483A1. These projectiles are of the latest Improved Conventional Munitions of the dual purpose variety-antipersonnel and anti-materiel. These high fragmentation, base ejection type projectiles consist of a steel body containing an expelling charge and 88 shaped charge grenade submissiles. In the fire-for-effect mode, the expelling charge ejects the 88 submissiles from the projectile during flight. The grenades orient themselves in the air stream and actuate upon ground or target impact. A shaped charged jet is expelled downward while the body bursts into a large number of high velocity fragments. The jet is capable of penetrating armor plate. Antipersonnel effects are obtained by fragmentation of the body. In the registration mode, the expelling charge is removed, a projectile spotting charge is attached to the time fuze and installed into the projectile, which will cause the M483A1 projectile to detonate all of the 88 grenades inside the projectile causing high fragmentation in the same manner as a standard high-explosive projectile. These projectiles weigh approximately 103 lbs and use the M577 and M724 ET fuzes only.

M483A1 PROJECTILE



AR 101882

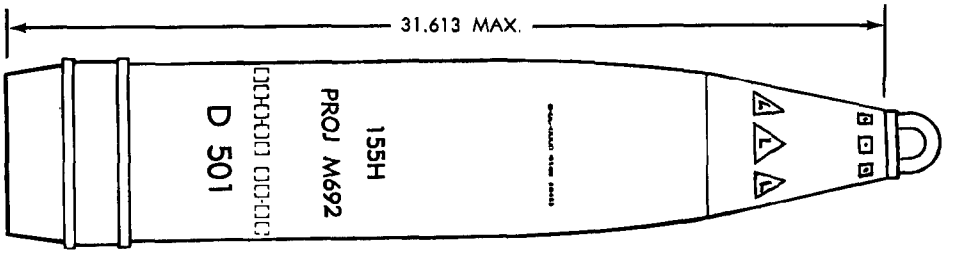
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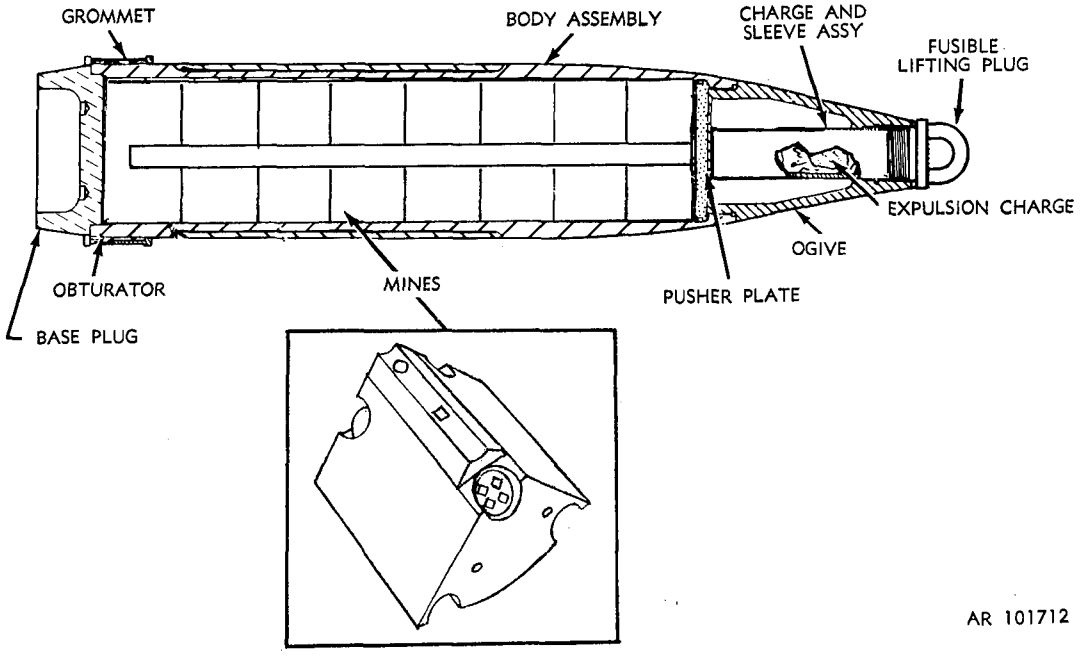
The M483A1 projectile or other projectile using the M483A1 carrier may be fired with or without an obturating band. If the obturating band is broken, remove and discard it. If it is dislodged, remove or reposition it.

m. PROJECTILE, 155 MILLIMETER HIGH EXPLOSIVE, M692.

This projectile is known as the Area Denial Artillery Munition (ADAM). It is painted olive drab with yellow markings. The most significant marking is the row of yellow triangles between the nose and the bourrelet and contains the letter L that indicates a long self-destruct time for the submunitions. These submunitions are antipersonnel mines to deny the enemy free use of certain areas for a period of time. This is a base-ejection type projectile, and uses the M577 time and M724 ET fuzes.

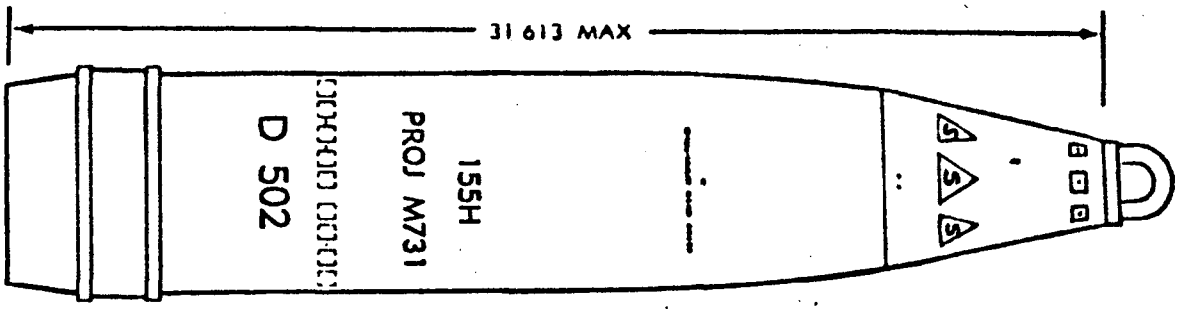
M692 PROJECTILE





n. PROJECTILE, 155 MILLIMETER HIGH EXPLOSIVE, AREA DENIAL ARTILLERY MUNITION, M731. This projectile is also known as the ADAM round, and it is exactly like the M692 above except the letter S painted in the yellow triangles is different indicating a shorter self-destruct time of the anti-personnel mine submunitions. This is a base-ejection type projectile and uses the M577 time and XM724 fuzes.

M731 PROJECTILE



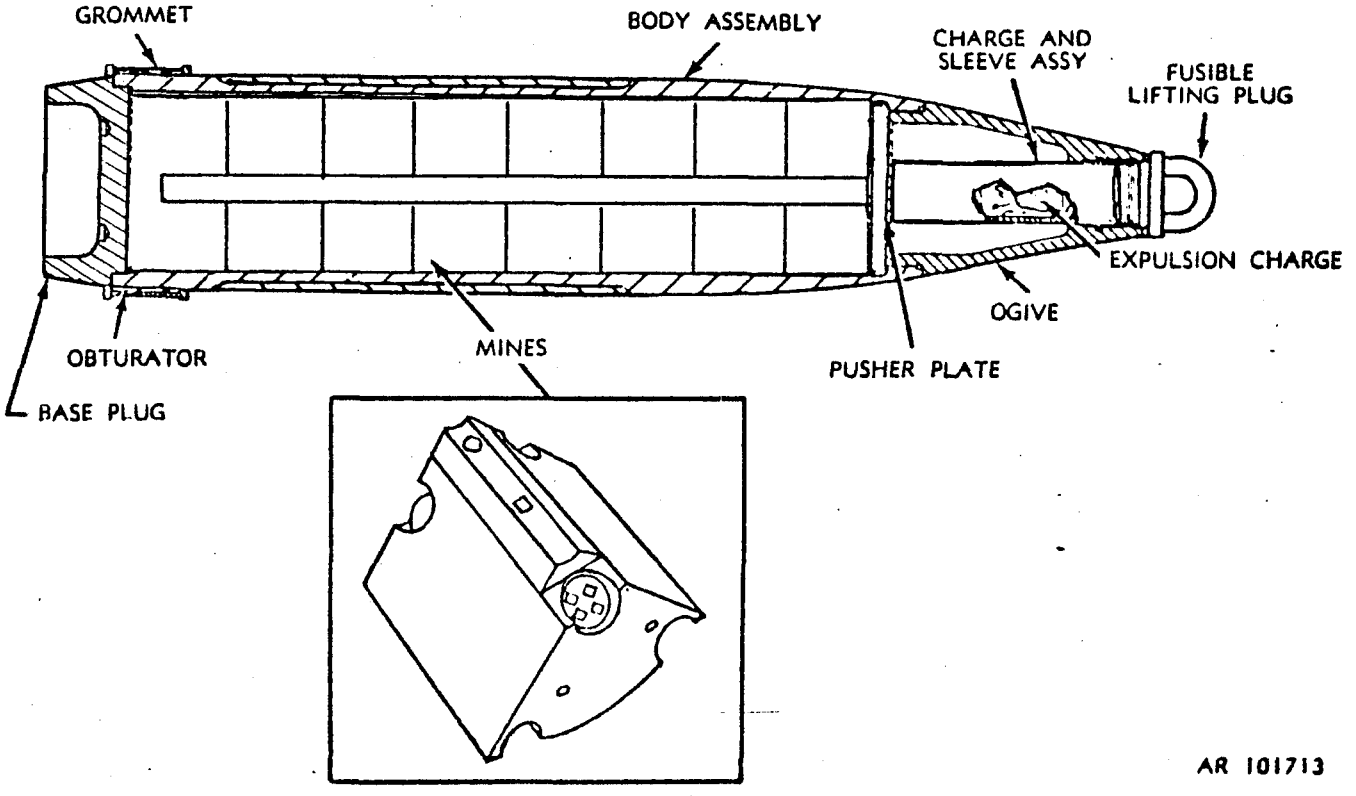


Table 3-2. Authorized Projectile-Fuze Combinations for Howitzer with Cannons M185, M199 and M1A2

WARNING

ICM Projectiles use Minimum Zone 3 (GB) or Zone 3 (WB) propelling charge and above. Firing below these zones may result in stickers. Zone 1 will not be fired in the M185 and M199 cannons. Zone 2 may be used with any M100 series projectiles and the M485. The M549/M549A1 may be fired with Zone 7 (WB) and the M119A1.

	Impact PD			MT	MTSQ				PROX-IMITY		Elec. Time	
Letter X denotes fuze compatibility. See Notes at bottom of chart for additional explanations. Projectiles (1)	M557	M739	M78CP Series	M565	M501	M564	M577	M582	M728	M732	M724	M587
Agent, H&HD, M110	X	X				X		X		X		
Agent, GB or VX, M121A1	X	X							(2) P			
HE, RAP M549/M549A1	X	X							P	X		
HE, M107	X	X	X			X		X	P	X		X
HE, XM 795	X	X				X				X		X
HE, M449 Series, ICM				X			X				X	
HE, M483A1, ICM							(3) X				X	
HE, M692/M731 ADAM							X				X	
Illumination, M485 Series (4)				X			X				X	
Smoke, HC, Colored, BE, M116 Series (5)				(5) X	(5) X		(5) X				X	
M116A1				X			X				X	
Smoke, WP, M110 Series	X	X				X		X		X		X

NOTE

1. For older fuze combination compatibility, see TM 9-1300-203/3, or TM 43-0001-28.

2. The letter P shows compatibility for proximity fuzes that requires removal of the supplementary charge to make room for the long intrusion fuze.

3. The M483A1 projectile may be used for self-registration (as a spotting round) by replacing the expulsion charge assembly with a projectile spotting charge added to the M577 fuze.

4. Reliability of projectiles M485A1 and M485A2 degrades rapidly when firing at zones 6, 7 and 8 with fuze settings of 10 seconds or less. Model M485 is restricted to firing at zones 1 through 6 and a temperature range of -40^{O} to 145^{O}F.

5. Old model M116 smoke rounds (gray with yellow band and markings) must use the M501 fuze. New model M116 smoke rounds (green with black markings) must use the M565 or M577 fuze.

Table 3-3. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATION FOR M185 CANNON

Projectiles	Propelling Charge											Firing Warnings
		(GB) M3 & M3A1 Charges				(WB) M4A1 & M4A2 Charges					M119 Charge 8	M119A1 Charge 8	
	1	2	3	4	5	3	4	5	6	7			
HE, M107	Charge 1 cannot be fired in the M185 Cannon because of stickers	X	X	X	X	X	X	X	X	X	X	X	
HE, XM 795		No	X	X	X	X	X	X	X	X	X	X	Firing below charge 3 may result in stickers
HE, M449, M449A1, ICM		X	X	X	X	X	X	X	X	X	X	X	
HE, M483A1, ICM		No	X	X	X	X	X	X	X	X	X	X	Firing below charge 3 may result in stickers
HE, M692, ADAM		No	X	X	X	X	X	X	X	X	X	X	Firing below charge 3 may result in stickers
HE, M731, ADAM		No	X	X	X	X	X	X	X	X	X	X	Firing below charge 3 may result in stickers
Illum, M485A1, M485A2		X	X	X	X	X	X	X	*X	*X	*X	*X	*M485A1/A2 Projectiles not reliable when fired at charges 6, 7, & 8 with fuze settings of 10 seconds or less
Agent H, HD, M110		X	X	X	X	X	X	X	X	X	X	X	M110 Agent Burster loaded with Tetrytol cannot be stored or fired at temperature exceeding 125°F (+52°)
Smoke, WP, M110(110E1) M110A1 (M110E2) M110A2 (M110E3)		X	X	X	X	X	X	X	X	X	X	X	M110 (M110E1) burster loaded w/ Tetrytol cannot be stored or fired at temperatures exceeding 125°F (+52°C)
Smoke, BE, HC, M116, M116B1		X	X	X	X	X	X	X	X	No	No	No	
Smoke, BE, HE, M116A2		X	X	X	X	X	X	X	X	X	X	X	

Table 3-3. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATION FOR M185 CANNON—Continued

Projectile	1	Propelling Charge (GB) M3 & M3A1 Charges 2	3	4	5	(WB) M4A1 & M4A2 Charges 3	4	5	6	7	M119 Charge 8	M119A1 Charge 8	Firing Warnings
Agent, GB or VX M121	Charge 1 cannot be fired in the M185 cannon because of stickers	X	X	X	X	X	X	X	X	X	X	X	M121 Burster loaded w/Tetrytol cannot be stored on fired at temperatures exceeding 125°F (52°C)
HERA, M549, M549A1		No	No	No	No	No	No	No	No	X	No	X	

PRIMER M82 is the only authorized primer to be used in the M185 Cannon.

Table 3-4. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATION FOR M199 CANNON

Projectile	1	Propelling Charge (GB) M3 & M3A1 Charges 2	3	4	5	(WB) M4A1 & M4A2 Charges 3	4	5	6	7	M119 Charge 8	M119A1 Charge 8	M203 Charge 8 S	Firing Warnings
HE, M107	Charge 1 cannot be fired in the M199 Cannon because of stickers	X	X	X	X	X	X	X	X	X	X	X	No	
XM795		No	X	X	X	X	X	X	X	X	X	X	X	Firing Below charge 3 may result in stickers.
HE, M449, M449A1, ICM		X	X	X	X	X	X	X	X	X	X	X	No	
HE, M483A1, ICM		No	X	X	X	X	X	X	X	X	X	X	X	Firing below charge 3 may result in stickers
HE, M692, ADAM		No	X	X	X	X	X	X	X	X	X	X	No	Firing below charge 3 may result in stickers
HE, M731, ADAM		No	X	X	X	X	X	X	X	X	X	X	No	Firing below charge 3 may result in stickers
Illum, M485A1, M485A2		X	X	X	X	X	X	X	*X	*X	*X	*X	No	*M485A1/A2 Projectiles not reliable when fired at charges 6, 7, & 8 with fuze settings of 10 seconds or less
Agent H, HD, M110		X	X	X	X	X	X	X	X	X	X	X	No	M110 Agent Burster Loaded with Tetrytol cannot be stored or fired at temperature exceeding 125°F (+ 52°C)
Smoke, WP, M110 (110E1) M110A1 (M110E2) M110A2 (M110E3)		X	X	X	X	X	X	X	X	X	X	X	No	M110 (M110E1) burster loaded w/ Tetrytol cannot be stored or fired at temperatures exceeding 125°F (+52°C)
Smoke, BE, HC, M116, M116B1		X	X	X	X	X	X	X	X	No	No	No	No	
Smoke, BE, HE, M116A1		X	X	X	X	X	X	X	X	X	X	X	No	

Table 3-4. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATION FOR M199 CANNON—Continued

Projectile	1	Propelling Charge (GB) M3 & M3A1 Charges 2	3	4	5	(WB) M4A1 & M4A2 Charges 3	4	5	6	7	M119 Charge 8	M119A1 Charge 8	M203 Charge 8 S	Firing Warnings
Agent, (GB or VX) M121	Charge 1 cannot be fired in the M199 cannon because of stickers	X	X	X	X	X	X	X	X	X	X	X	No	M121 Burster loaded w/Tetrytol cannot be stored or fired at temperatures exceeding 125°F (52°C)
HERA, M549, M549A1		No	No	No	No	No	No	No	No	X	No*	X	X	The M549 model is restricted from use with the M203. Use M549A1 model only with the M203 charge

PRIMER M82 is the only authorized primer to be used in the M199 Cannon

*May be fired for combat emergency use only.

Table 3-5. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATIONS FOR THE M109 (M126A1 CANNON TUBE) HOWITZER AND FOR THE M114A2 (M1A2 CANNON TUBE) HOWITZER

Projectiles	Propelling Charge (GB) M3 & M3A1 Zones					Propelling Charge (WB) M4A1 & M4A2 Zones					Firing Warnings
	1	2	3	4	5	3	4	5	6	7	
HE, M107	X	X	X	X	X	X	X	X	X	X	
HE, XM795	No	No	X	X	X	X	X	X	X	X	
Agent, H or HD, M110	X	X	X	X	X	X	X	X	X	X	M110 Agent loaded w/tetrytol burster cannot be stored or fired at temperature exceeding 125°F (52°C)
Agent, GB or VX M121	X	X	X	X	X	X	X	X	X	X	M121 Agent loaded w/tetrytol burster cannot be stored or fired at temperature exceeding 125°F (52°C)
Smoke, WP, M110 M110E1	X	X	X	X	X	X	X	X	X	X	M110 Smk loaded w/tetrytol burster cannot be stored or fired at temperature exceeding 125°F (52°C)
Smoke, WP, M110A1 M110A2	X	X	X	X	X	X	X	X	X	X	
Smoke BE, HC, M116 M116B1	X	X	X	X	X	X	X	X	X	No	
Smoke, BE, HC, M116E2	X	X	X	X	X	X	X	X	X	X	
Illum, M118A2, M118A1B1	X	X	X	X	X	X	X	X	X	X	
Illum, M485A1, M485A2	X	X	X	X	X	X	X	X	*X	*X	*M485A1/A2 Projectiles not reliable when fired at Zones 6 and 7 with fuze settings of 10 seconds or less
HERA, M549, M549A1	No	No	No	No	No	No	No	No	No	X	M549/M549A1 cannot be fired in the rocket off mode, the rocket motor-off cap must be removed prior to firing
HE, M483A1 (ICM)	X	X	X	X	X	X	X	X	X	X	

Table 3-5. AUTHORIZED PROJECTILE/PROPELLING CHARGE COMBINATIONS FOR THE M109 (M126A1 CANNON TUBE) HOWITZER AND FOR THE M114A2 (M1A2 CANNON TUBE) HOWITZER — Continued

Projectiles	Propelling Charge (GB) M3 & M3A1 Zones					Propelling Charge (WB) M4A1 & M4A2 Zones					Firing Warnings
	1	2	3	4	5	3	4	5	6	7	
HE, M449, M449A1, ICM	X	X	X	X	X	X	X	X	X	X	
HE, M692, ADAM	X	X	X	X	X	X	X	X	X	X	
HE, M731, ADAM	X	X	X	X	X	X	X	X	X	X	

Only M82 Primer may be used with M126A1 Cannon
Only MK2A4 Primer may be used with the M1A2 Cannon

Section III. FUZES

3-3. AUTHORIZED FUZES

WARNING

The firing of a field artillery round without a fuze or with an unauthorized fuze is strictly prohibited. Only authorized fuzes will be used with the authorized projectiles and propelling charges or an inbore premeture result.

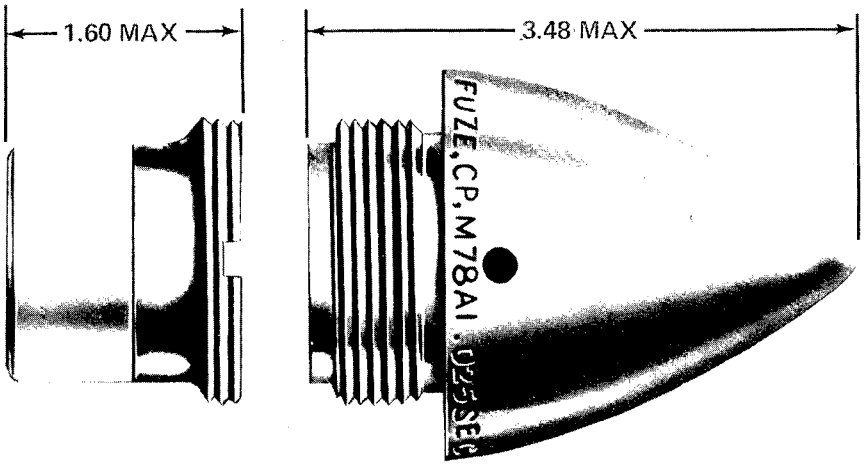
Paragraphs below describe some of the fuzes to be used with this weapon. For additional information and more detailed descriptions and functioning of the authorized fuzes, see TM 43-0001-28.

a. Fuze, Point Detonating Concrete Piercing, M78 and M78A1 and Booster M25.

(1) M78 series fuzes are constructed especially for use against concrete targets. Fuzes M78A1 are of two types—a non-delay type used primarily for spotting purposes and delay type used against concrete targets.

(2) The non-delay fuze has its nose painted white about 1-inch wide from the tip. Booster M25 is a separate assembly, but is packed and shipped with the fuze for assembly to the projectile at the time the projectile is to be fired. This booster is designed especially for use with M78 series fuzes and cannot be used with any other fuze. If used with a deep cavity shell, the supplementary charge must remain in the fuze well cavity.

POINT DETONATING CONCRETE PIERCING FUZE M78A1 AND BOOSTER M25

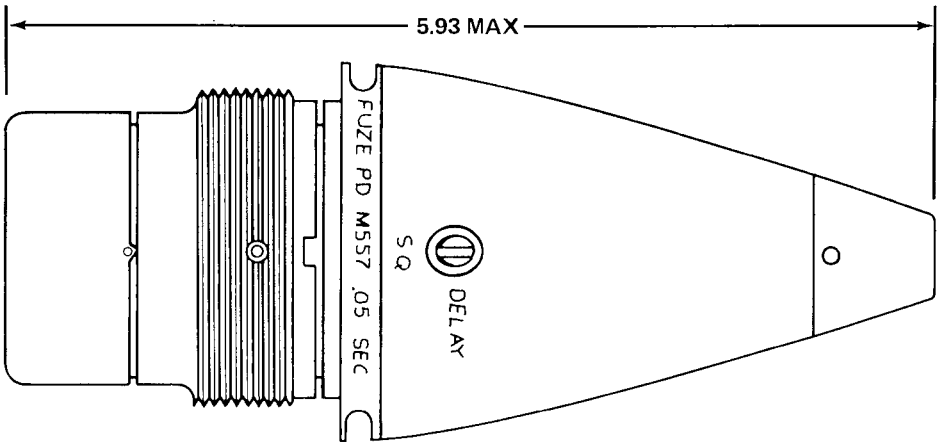


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b. Fuze, Point Detonating: M557 or M739.

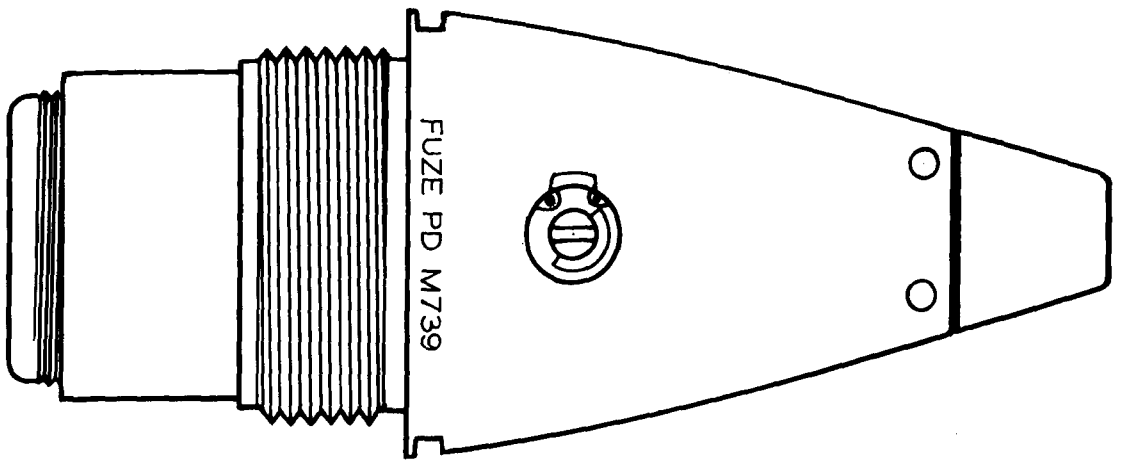
(1) The M557 fuze has a selective superquick-delay set screw. It is packed set for superquick and has a booster attached. Duds may occur when set for delay functioning and fired with M3A1 Green Bag Charge Zones 1 and 2. Premature functioning can occur when fuzes are fired in heavy rainfall.

FUZE, POINT DETONATING: M557

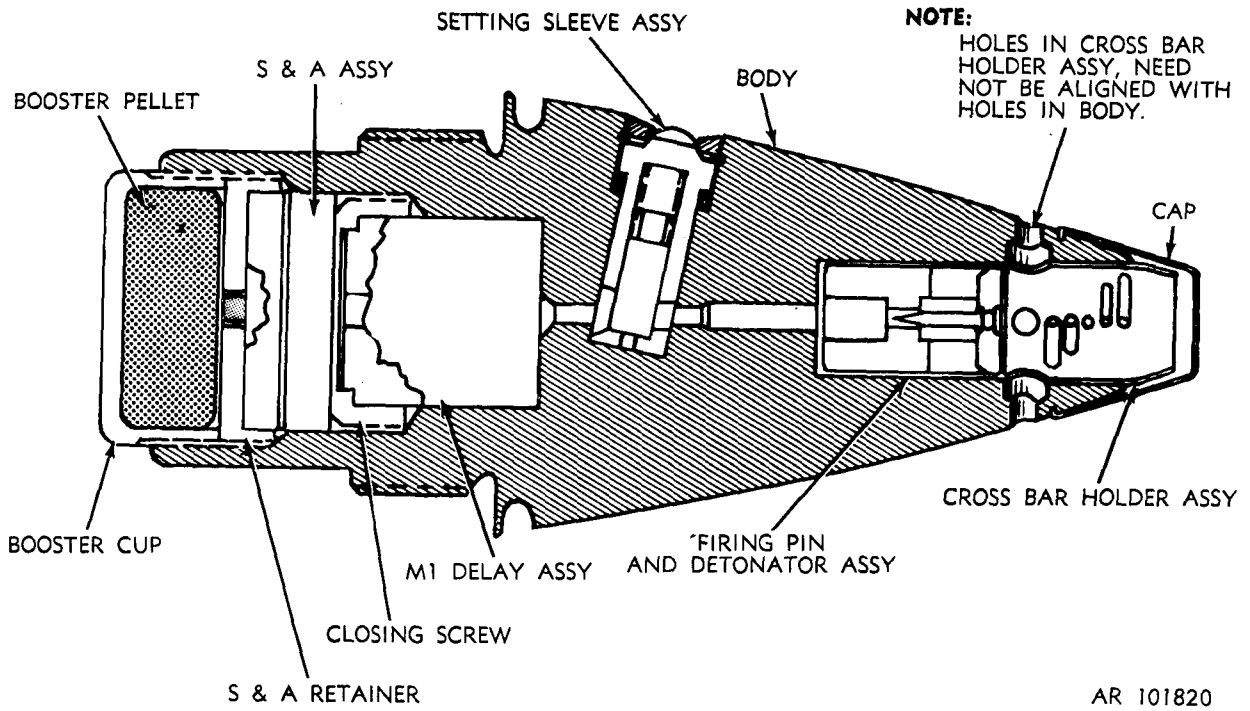


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POINT DETONATING FUZE M739



AR 101819

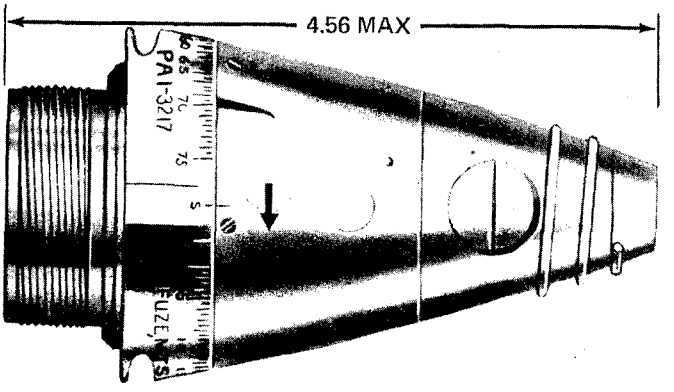


AR 101820

(2) Fuze, Point Detonating: M739. The M739 fuze is the latest improved version of the selective impact fuze. This fuze has a solid aluminum ogival body with a two inch threaded base. The fuze contains a rain insensitive sleeve that allows firing in heavy rain without premature fuze functioning. This fuze can be set for superquick or delay action by turning the setscrew.

c. Fuze, Mechanical Time and Superquick: M501A1 (or M501). Fuze, M501A1 or M501, is a combination mechanical time and superquick fuze with settings for time action (2 to 75 seconds) and an impact element for superquick action.

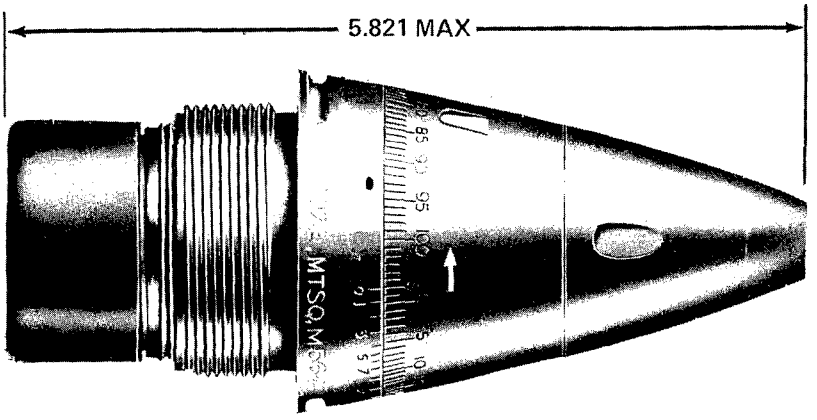
MECHANICAL TIME AND SUPERQUICK FUZE M501A1



AR199937

d. Fuze, Mechanical Time and Superquick, M564. This fuze is an provement over the older MTSQ fuzes (such as M520 series) in that it provides a longer timing mechanism (100 seconds) for functioning at longer ranges. Fuzes manufactured through 1969 must be set on 90 seconds if superquick (impact) action is desired. Setting of these fuzes between S and 2 seconds may result in functioning after approximately 2 seconds. Fuzes manufactured from 1970 on may be set as shipped on S for superquick (impact) functioning. Date of manufacture is stamped on fuze body before lot number. Premature functioning of the M564 fuze may occur downrange if the fuze is fired in heavy rainfall.

MECHANICAL TIME AND SUPERQUICK FUZE M564



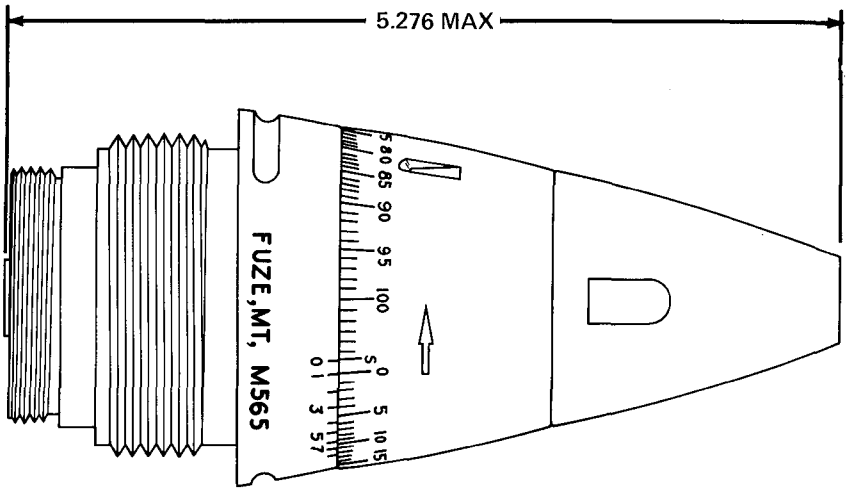
AR199933

e. Fuze, Mechanical Time, M565.

(1) MT fuze M565 is similar to MTSQ fuze M564 except that the fuze contains neither the point detonating assembly nor the booster assembly.

(2) Fuze M565 can be set from 2 to 100 seconds. Like the M564, fuze M565 employs a vernier scale to assure a setting accuracy of 0.1 seconds. This fuze is used with base ejection projectiles only.

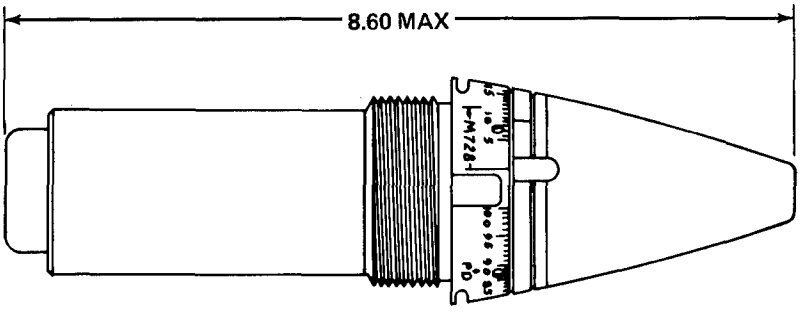
MECHANICAL TIME FUZE M565



AR199939

f. Fuze, Proximity (VT) M728. The M728 proximity (VT) fuze is used with deep cavity projectiles and is essentially a self-powered radio and transmitting unit. The fuze can be set from 5 to 100 seconds. The time setting determines at what time along the trajectory the fuze will become activated. The M728 has an impact element that is armed 3 seconds after firing and will function either on proximity action or impact action, whichever occurs first. The M728 should be set for impact action by setting the time ring to 90. 0 seconds or PD mark. A protective coating is on the fuze ogive to reduce the possibility of static electricity causing early downrange functioning. The fuze M728 is restricted from overhead firing as possible downrange prematures may result. It is also restricted from use with the M203 propelling charge.

PROXIMITY (VT) FUZE, M728 SERIES

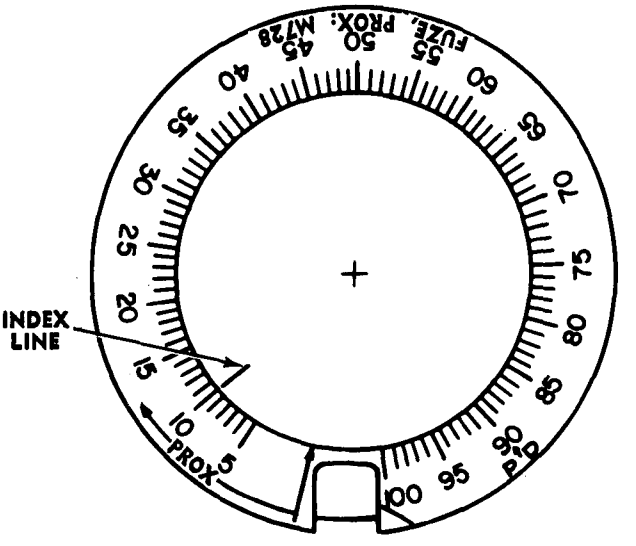


AR199893

g. Fuze, Proximity, M732. This proximity fuze is the latest development in the proximity fuze family. It is a short-intrusion fuze of the same overall length as the standard impact or mechanical time fuze.

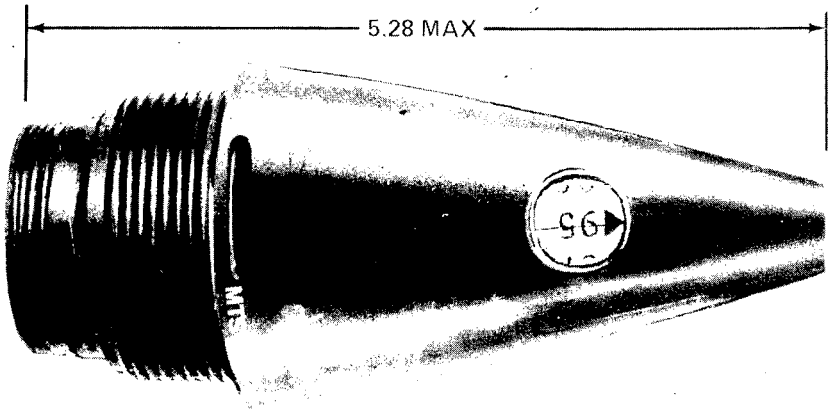
The removal of the supplementary charge is not required; in fact, the charge must be left in the fuze well for proper functioning of this fuze. This new fuze has a time ring that can be set from 0 to 150 seconds.

PROXIMITY FUZE, M732



h. Fuze, Mechanical Time and Superquick, M577 and M582. These fuzes have a 200 second mechanical time mechanism with three movable digital dials similar to a speedometer. The time setting key is located on the end of the fuze nose. Each fuze has a window through which the dials are viewed. The dials permit setting the fuze to the nearest one-tenth (.1) second. The dial closest to the fuze nose indicates the time in hundreds of seconds. (The triangle (△) position is a non-time setting.) The second dial indicates time to tens of seconds and the third dial indicates the nearest second and also one-tenth seconds by using the scale on the right edge of the dial. The time desired is set under the hairline. The fuze is not sensitive to rain. Detailed setting instructions are outlined in paragraph 4-19. Fuze setter, M35 or a flat tip screwdriver is used to set this fuze.

MECHANICAL TIME AND SUPERQUICK FUZE, M577/M582



AR199931

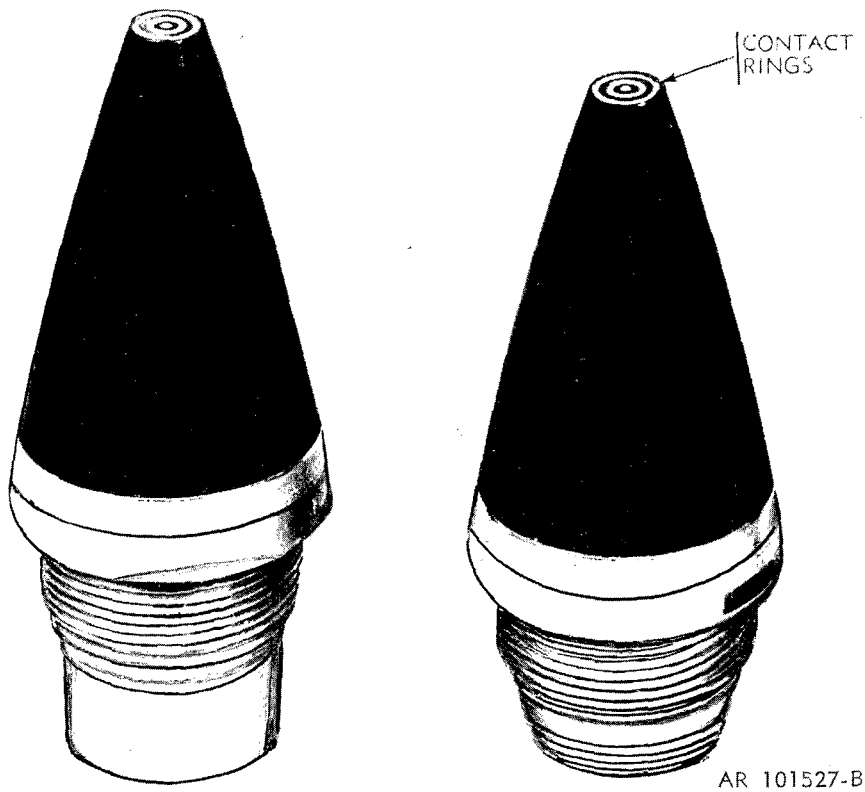
i. Fuze, Electronic Time: M587 and M724.

(1) These fuzes are for use with all artillery projectiles having a standard 2 inch thread. The fuze M587 is utilized with the high explosive and related projectiles where a fuze explosive booster pellet is required to initiate the high explosive filler. This fuze will provide setting times from .2 seconds to 200 seconds in increments of tenth of a second and was designed to eventually replace the M564 and M582 fuzes. The fuze M724 is utilized for base ejection projectiles where initiation of an ejection charge is paramount, and will provide the same setting time as the M587 and is designed to eventually replace the M565 and M577.

(2) The electric time fuzes are aluminum with a black painted aluminum ogive and a 2 inch threaded base to match the projectile nose and fuze cavity.

(3) The setting of both fuzes will be accomplished by the use of the M36 fuze setter which is a hand-held, battery powered electronic device that time sets either fuze in less than one second.

FUZE ELECTRONIC TIME



Section IV. PROPELLANT CHARGES

3-4. PROPELLING CHARGES.

The following are authorized propelling charges for the M109, M109A1/M109A2, M198, and M114A2 howitzers.

a. Propelling Charge M3A1. This is a green bag charge divided into a base and four increments for firing in zones 1 through 5. It has a flash reducer pad assembled forward of the base charge with similar one-ounce pads assembled forward of increments 4 and 5. The increment bags are tied together by cloth typing straps. An igniter charge in a red cloth bag is sewed to the rear of the base section.

WARNING

Because of the potential sticker problems, charge 1 is used in the M185 and M199 cannons only in a combat emergency.

b. Propelling Charge M3. This is a green bag charge similiar to propelling charge M3A1 except it is not assembled with a flash reducer and black powder is used in the igniter pad.

c. Propelling Charge M4A2. This is a white bag charge consisting of a base charge and four increments for firing in zones 3 thru 7. The increments are tied together by cloth tying straps. A CBI igniter charge in a red cloth bag is sewed to the rear of the base section. It has a flash reducer pad assembled forward of the base charge.

d. Propelling Charge M4A1. Propelling charge M4A1 is identical to the M4A2 except that it does not contain a flash reducer and the base igniter contains black powder instead of CBI. The M2 flash reducer may be used with this charge and is a separate item of issue.

e. Propelling Charge M119. This is a special single zone (8) charge. This white bag charge consists of only one increment with an igniter bag sewn on the base, and a flash reducer on front of the charge.

WARNING

Propelling charge M119/M119A1 is used only in the M109A1 with M185 tube and in the M198 with M199 tube. Do not use this charge in any M126 (M109 howitzer) series tube or M1A2 (M114A2 howitzer).

f. Propelling Charge M119A2. This charge is identical in appearance to the M119 charge. It contains some design improvements including a modified flash reducer. The modified flash reducer allows firing of this charge with the M549/M549A1 projectile.

WARNING

When firing the M203 charge (Red Bag) the following must be accomplished:

Double ear protection must be worn (earplugs and helmet with acoustical muffs)

A 25-ft lanyard must be used

No firing elevation less than 270 miles

Crew stand sideways to blast

No more than 100 rounds/day

g. Propelling Charge M203. The M203 propelling charge is a zone 8 S propelling charge developed for extended range in long-tube (M199) 155mm howitzers. This red bag charge consists of one increment with an igniter bag sewn on its base, a central core igniter extending through the center of the charge, and a flash reducer in front of the charge. The entire length of the charge is encased in a tight-fitting lacing jacket for added strength and stability.

h. Trilateral Cartridges. These propelling charges are desired to provide a zoning solution for the Trilateral (Federal Republic of Germany, United Kingdom, and Italy) FH70 and SP70 Howitzers. Interchangeability testing will be accomplished as part of the XM795 development program. Information for this propelling charge cartridge will be added when available from the United Kingdom.

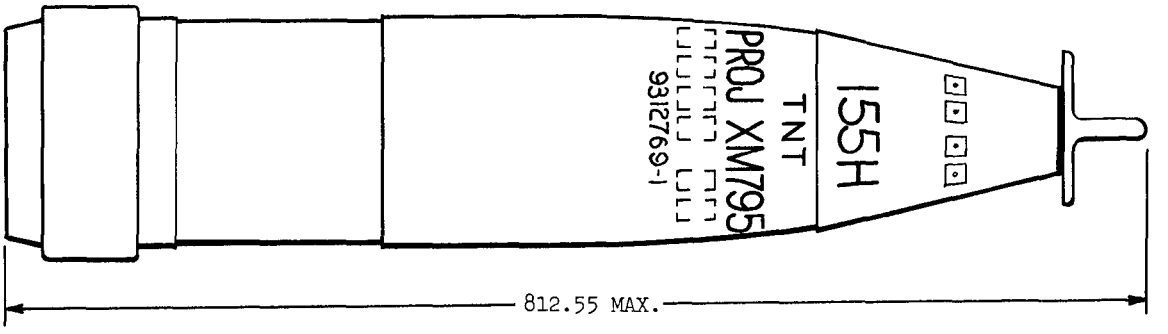
Section III. SUPPLEMENTAL INPUT DATA TO TM 43-0001-28

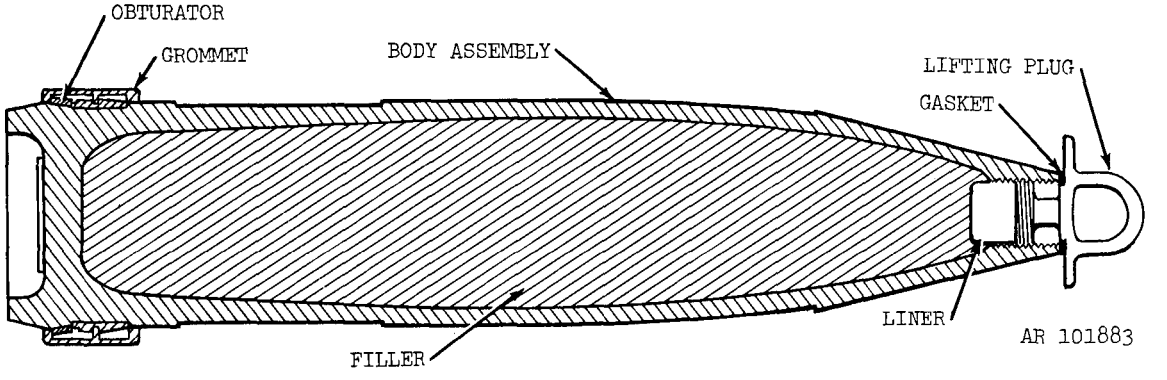
2-6. PROJECTILE, 155mm: HE, XM795 DATA SHEETS.

CHAPTER 4

This chapter contains supplemental data input for TM 43-0001-28

PROJECTILE, 155MM: HE, XM795





Use:

This projectile is part of the new family of ballistically similar 155mm Howitzer ammunition. It will eventually replace the 155mm HE, M107 projectile. The XM795 projectile will be utilized to provide conventional direct and general support fires for divisional/corps elements.

Description:

The configuration of the XM795 projectile will be similar to the M483A1 externally, except that it is two inches shorter. The XM795 projectile consists of 23.8 pounds of TNT explosive loaded into a 78.1 pound body assembly. A gilding metal rotating band encircles the high fragmentation steel HF-1 body near its base. The obturator is plastic. The base is protected by a carbon steel base plate. The projectile is fitted with a protective lifting plug at the nose and a grommet which protects the rotating band during shipping and handling. The projectile uses impact, mechanical time, electrical time, and short intrusion proximity fuzes. The XM795 projectile has no supplementary charge. The projectiles have a lifting plug designed to protect the projectile nose area against accidental damage. The new plug has an oversized (3 3/4 in.) flange. If this protective lifting plug is broken at the neck area,

(Change) (3-128.3)

the threaded portion of the plug will remain in the projectile and the projectile cannon be fuzed. No attempt should be made to extract any portion of a broken plug from a projectile; the projectile is not to be used and should be returned to supply point.

Functioning:

When the weapon is fired, the rotating band engages the barrel rifling to impart spin to the projectile for stability in flight. The obturator of the rotating band forms a seal to prevent leakage of gas pressure past the projectile. Rapidly expanding gases from the burning propellant charge propel the projectile through the barrel with the velocity necessary to reach the target. At the target, the warhead filler is detonated by the fuze. The fuze mode can be either impact, preset time, or proximity depending on fuze selection.

Temperature Limits:

Firing:	
Lower Limit	-50°F
Upper Limit	+145°F
Storage:	
Lower Limit	-65°F for periods of not more than 3 days.
Upper Limit	+160°F for not more than 4 hours per day.
Packing	8 projectiles per pallet
Pallet:	
Weight w/projectile	865 lbs
Dimensions	29 1/8 x 14 5/8 x 36 1/2 in.
Cube	9.0 cubic feet

Shipping and Storage Data:

Quantity-distance class	1.1
Storage compatibility group	D
DOT shipping class	A
DOT designation	EXPLOSIVE PROJECTILE
DODAC	1320 - To Be Assigned
Assembly Drawing number	9312769

Tabulated Data:

Complete round:	
Type	High explosive
Approx weight	103.4 lbs - 46.90 kg
Length	33.2 in. - 84.33 cm
Cannons used	M185, M199, M1A2, M126A1
Projectile:	
Body material	Steel
Color	Olive drab w/ yellow markings
Filler & Weight	TNT 23.8 lbs
Components:	
Propelling charge	M3A1 and M4A2 M119, M119A1 M203, XM211
*Trilateral cartridges	1, 2, 3
Primer:	
M82	for M126A1, M185, M199 Cannons
M2A4	for M1A2 Cannon
Fuze (PD)	M557, M739
(MTSQ)	M564
(Prox.)	M732
ET	M587
Performance:	
Range:	
Maximum	22 to 24 kilometers (M198 Howitzer)
Minimum (indirect fire)	1800 to 2800 meters at 200 mils quadrant 2600 to 3600 meters at high angle

Propellant/Muzzle Velocity (M185/M199 Cannon)

M3A1 (3 thru 5)	863 to 1178 fps	263 to 441 mps
M4A2 (3 thru 7)	975 to 1795 fps	297 to 547 mps
XM211 (3 thru 6)	938 to 1930 fps	286 to 588 mps

(TM 43-0001-28)

Propellant/Muzzle Velocity (M185/M199 Cannon) — Continued

M119/A1	2135 fps	651 mps
M203	2630 fps	802 mps
Trilateral Cartridge 1 (Zone 1-2)	830 fps	253 mps (zone 2 only)
Trilateral Cartridge 2 (Zone 3-7)	938 to 2190 fps	288 to 668 mps
Trilateral Cartridge 3 (Zone 8)	2630 fps	802 mps

Weapon/Ammunition Combinations For XM795 Projectile:

WEAPON	FUZES	PROP CHARGE
M198, M109A2, M109A3, FH70, SP70	PD-M739, M557 MTSQ-M564 Prox- M732 ET M587	M3A1, M4A2, M119 Series, M203, XM211, *Trilateral Cartridge 1, 2, 3
M109A1	Same as above	M3A1, M4A2, M119 Series, XM211, *Trilateral Cartridge 1 and 2
M109/M114A2	Same as above	M3A1, M4A2

* These Trilateral Cartridges provide a zoning solution for the Trilateral (Federal Republic of Germany, United Kingdom and Italy) FH 70 and SP 70 Howitzers. This zoning solution is designed to give velocity levels which are equivalent at appropriate zones to the US XM211 and M203 propelling charges. Testing will be conducted during development of the XM 795 to verify interchangeability.

(3-128.5) (Change)

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CHAPTER 5

SUPPLEMENTAL INPUT DATA TO TM 9-1300-251-20

ORGANIZATIONAL MAINTENANCE

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Table 4-1. *Army-Authorized Projectiles and Propelling Charges for Guns (175-MM Only)*

Nomenclature and caliber	Length (in.)[2]	Weight (lb.)[2]	Color identification	DODIC	Maintenance functions (Refer to appendix B)	
					Group No.	Functional group
Projectiles						
PROJECTILE, 175-MM: HE, M437A2 (M437E2) and M437A1 (M437E1).	37.89	147.30	OD w/yellow markings.	D572	0501	*a,c,d, k,l,m, n,o*
				D591 (w/o supplemental charge)	0501	*a,d,l, m,n,o*
Propelling Charges						
CHARGE, PROPELLING, 175-MM: M86 Series.[1]	49.50	58.00	White w/black markings.	D361	0502	*a,b,c, d,e,f, g*
CHARGE, PROPELLING, 175-MM: M124,	16.0	17.5	Green w/black markings.	D536	0502	*a,d,e*
DUMMY PROPELLING CHARGE, 175-MM: M98.	49.5	56.7	White w/black markings.	D535	0502	*a,e*

[1]Length and weight reflect the latest production model.
[2]Values are nominal.

Table 4-2. *Army Authorized Projectiles and Propelling Charges for Howitzers (155-MM and 8 Inch)*

Nomenclature and caliber	Length (in.)[2]	Weight (lb.)[2]	Color identification	DODIC	Maintenance functions (Refer to appendix B)	
					Group No.	Functional group
1 55-MM Projectiles						
PROJECTILE155-MM: Gas, Nonpersistent, GB VX, M121A1 and M121.	27.59	99.70	Gray w/green markings and 2 green bands or gray w/green markings, 3 green bands and 1 yellow band.	D542(GB) D568(VX)	No maintenance authorized below level.	N/A
PROJECTILE,155-MM: Gas, Persistent, H, HD, M110.	26.78	98.5	Gray w/green markings and 2 green bands.	D543	No maintenance authorized below depot level.	N/A
PROJECTILE, 155-MM: HE: M107.	27.57	96.25	OD w/yellow markings.	D544 (w/ supplementary charge)	0501	*a,c,k l,m,n*
PROJECTILE, 155mm: HE, XM795	**33. 2**	**103. 4**	**OD w/yellow markings**	—	—	**a, c, k, l, m, n**

Table 2-8. Army-Authorized Projectiles and Propelling Charges for Howitzers (155-MM and 8 Inch) – Continued

Nomenclature and caliber	Length (in.)[2]	Weight (lb.)[2]	Color identification	DODIC	Maintenance functions (Refer to appendix B)	
					Group No.	Functional group
PROJECTILE, 155-MM: HE, M449, M449E1, and M449A1 (M449E2).	26.9	95.00	OD w/yellow markings or OD w/yellow markings, yellow diamonds	D571 D561 (M449, M449E1) D562 (M449E2, M449A1)	0501 0501	*a,c,l,n* *e,g,h,l* *a,b,d,e* *a,b*
PROJECTILE, 155-MM: HE, M483.	32.2	102.7	OD w/yellow markings and diamonds.	D563	0501	*e,g,h,l*
PROJECTILE, 155-MM: HE, M483A1.	31.6	102.6	OD w/yellow markings and diamonds.	D563	0501	*e,g,h,l*
PROJECTILE, 155-MM: HE, M692.	31.6	102.5	OD w/yellow markings and diamonds.	D501	0501	*e,g,h,l*
PROJECTILE, 155-MM: HE, M731.	31.6	102.5	OD w/yellow markings and triangles.	D502	0501	*e,g,h,l*
PROJECTILE 155-MM: HERA, M549A1.	34.39	95	OD w/yellow markings.	D578	0501	*a,c,d,k,l, m,n,o,p*
PROJECTILE, 155MM: HERA, M549.	34.39	96	OD w/yellow markings.	D579	0501	*a,c,d k,l,m, n,o,p*
PROJECTILES, 155-MM: AT, M718 and M741 (RAAM) (w/lifting plug).	33.8	103	OD w/yellow markings and triangles.	N718/D503 M741/D509	0501	*a,e, h,l,m,n*
PROJECTILE, 155-MM: Illuminating, M118 Series,	24.24	103.06	Gray w/white markings and white band	D545	0501	*a,c,f g,l,m,n*
PROJECTILE, 155-MM: Illuminating, M485 Series.	23.79	94.00	Gray w/white markings and white band	D505	0501	*a,c,f, g,l,m,n*
PROJECTILE, 155-MM: Smoke, WP, M110 Series.	26.93	99.00	Gray w/yellow markings and yellow band or lt green w/lt red markings and yellow band.	D550	0501	*a,c,i, l,m,n*
PROJECTILE, 155-MM: Smoke, Colored, BE, M116, M116E1.	27.57	86.23	Gray w/yellow markings and yellow band or lt green w/black markings.	D547 (green) D549 (red) D551 (yellow)	0501	*a,c,d, f,i,l, m,n*
PROJECTILE, 155-MM: Smoke, HC, BE, M116 Series.	27.57		Gray w/yellow markings and yellow band or lt green w/black markings.	D548	0501	*a,c,d, f,i,l,m*
DUMMY PROJECTILE, 155-MM: M7.	27.56	95.00	Black w/red band and brass.	D553	0501	*a*
Charges, Propelling, 155-MM						
CHARGE, PROPELLING, 155-MM: Green Bag, M3 Series.	16.00	17.46	Green w/black markings.	D540	0502	*a,d,e*
CHARGE, PROPELLING, 155-MM: White Bag, M4 Series.	21.00	27.1	White w/black markings.	D541	0502	*a,b,d,e*
CHARGE, PROPELLING 155-MM: White Bag, M119.	26.00	21.0	White w/black markings.	D533	0502	*a,d,e, f,g,h*
CHARGE, PROPELLING, 155-MM: M119A1.	26.00	23.0	White w/black markings.	D533	0502	*a,d,e,f, g,h*
CHANGE, PROPELLING, 155mm M203	**30. 25**	**31. 7**	**Red w/black marking**	**D532**	**0502**	**a, d, e, f, g, h**

REPAIR PARTS LIST - Continued

(1) Item no.	(2) SMR code	(3) National stock no.	(4) Part No.	(5) Federal supply code for mfg	(6) Description	(7) Unit of measure	(8) Qty incorporated in unit
					GROUP: 05 SEPERATE—LOADING AMMUNITION—Continued 0501: PROJECTILE—Continued		
0501-4	XBOOO	8140-00-560-0463	7549275-4	19203	PALLET, COVER ASSEMBLY: for Projectiles 155-MM, M107, M110 Series, M116 Series, M121 Series, M485 Series.	ea	1
0501-5	XBOOO	8140-00-149-0580	76-3-9	19203	CRATE, PACKING: for Dummy Projectile 155-MM M7, and Dummy Projectile, 8 Inch, M14.	ea	1
0501-6	XBOOO	8140-00-144-9908	8857344	19203	PALLET BASE AND COVER: for Projectile, 175-MM M437 Series.	ea	1
0501-7	XBOOO	8140-00-084-0405	7548345	19303	PALLET, BASE ASSEMBLY: for Projectile 8 Inch, M106, M404 and M426.	ea	1
0501-8	XBOOO	Requested	9229038	19203	PALLET BASE AND COVER: for jectile, 8 Inch, M509E1.	ea	1
0501-9	XBOOO	8140-00-560-0464	7548346	19203	PALLET, COVER ASSEMBLY: for Projectile, 8 Inch, M106, M404 and M426.	ea	1
0501-10	XBOOO	—	10520044	19203	GROMMET: for Projectile, 155-MM: HERA, M549/M549A1.	ea	1
0501-11	XBOOO	—	9235993	19203	ROCKET-OFF CAP: for Projectile, 155-MM: HERA, M549/M549A1.	ea	1
0501-12	XBOOO	—	9327883	19203	PALLET, PROJECTILE: for 155-MM, HERA, M549/M549A1	ea	1
0501-13	XBOOO	—	9327881	19203	PALLET, COVER ASSEMBLY: for Projectile, 155-MM, HERA, M549/M549A1, and HE XM795	ea	1
0501-14	XBOOO	—	9327882	19203	PALLET BASE ASSEMBLY: for Projectile, 155-MM, HERA, M549/M549A1, and HE XM795	ea	1
					0502: Propelling System		
0502-1	XBOOO	8140-00-859-8017	8880528	19203	CONTAINER, AMMUNITION: METAL: M14A2 for Charge, Propelling 155-MM, M131 Series.	ea	1
0502-2	XBOOO	8140-00-864-3221	8880527	19203	CONTAINER, AMMUNITION, METAL: M13A2 for Charge, Propelling, 155-MM, M4.	ea	1
0502-3	XBOOO	8140-00-262-9365	9234357	19203	CONTAINER, AMMUNITION, METAL: PA 37A1 for Charge, Propelling, 155-MM, M119, M119A1.	ea	1
0502-4	XBOOO	8140-00-891-6162	8880532	19203	CONTAINER, AMMUNITION, METAL: M460A2 for Charge, Propelling, 175-MM, M86, M98, and M124 series.	ea	1
0502-5	XBOOO	8140-00-369-9118	8880530	19203	CONTAINER, AMMUNITION, METAL: M18A2 for Charge, Propelling, 8 Inch, M1.	ea	1
0502-6	XBOOO	8140-00-861-2104	8880531	19203	CONTAINER, AMMUNITION, METAL: M19A2 for Charges, Propelling, 8 Inch, M2 and M4.	ea	1
0502-7	XBOOO	8140-00-258-8313	9211780	19203	CARTON, PACKING, AMMUNITION: for Additive, Jacket, M1 for Charge, Propelling, 175-MM, M86 Series.	ea	1
0502-8	XBOOO	8140-00-258-8311	9211781	19203	BOX, PACKING, AMMUNITION: for Additive Jacket, M1 for Charge Propelling, M86 Series.	ea	1
0502-9	XBOOO	8140-00-149-0590	922629	19203	BOX, WIREBOUND, PACKING, AMMUNITION: for Reducer, Flash Propelling Charge M2.	ea	1
0502-10	XBOOO	8140-00-149-0583	9226294	19203	SHIPPING AND STORAGE CONTAINER: for Reducer, Flash Propelling Charge, M2.	ea	1

CHARGE, PROPELLING, 155-MM: White Bag, M119 Series	Metal container	None	1	N/A	42.5	20.5	1.2	B
DUMMY PROPELLING CHARGE, 155-MM: M2	As required		N/A		29	None	0.89	N/A
PROJECTILE, 155-MM: Gas, Non-persistent, GB, M121, M121A1	Pallet		8	N/A	831	19.6	6.8	D
PROJECTILE, 155-MM: Gas, Persistent, H or HD, M110	Pallet		8	N/A	797	6.84	6.8	D
PROJECTILE, 155-MM: Gas, Persistent, VX, M121A1	Pallet		8	N/A	831	22	6.8	D
PROJECTILE, 155-MM: HE, M107, M107B2	Pallet		8	N/A	797	120	6.8	B
PROJECTILE, 155mm: HE, XM795	Pallet		8	N/A	865	190.4	9.0	D
PROJECTILE, 155-MM: HE, M449, M449A1 (M449E2), M449E1	Pallet		8	N/A	804	22.4	6.8	B
PROJECTILE, 155-MM: HE, M483	Pallet		8	N/A	874	48	10	B
PROJECTILE, 155-MM: HE M483A1	Pallet	None	8	N/A	874	48	9.7	B
PROJECTILE, 155-MM: HE M692	Pallet	None	8	N/A	874	13.5	9.7	B
PROJECTILE, 155-MM: HE M731	Pallet	None	8	N/A	874	13.5	9.7	B
PROJECTILE 155-MM: HE RA, M549	Pallet		8	N/A	830	128	9.5	B
PROJECTILE, 155MM: HERA, M549A1	Pallet	None	8	N/A	830	120	9.5	B
PROJECTILE 155-MM: illuminating, M118, M118A1, M118A2, M118B1, M118A1B1, M118A2B1				N/A				D
	Pallet		8	N/A	824	0.944	6.8	D
PROJECTILE, 155-MM: Illuminating, M485, M485A2, M485E1	Pallet		8	N/A	782	19.12	6.8	D
PROJECTILE, 155-MM: Smoke, BE, M116, M116E1	Pallet		8	N/A	727	2.24	6.8	D
PROJECTILE, 155-MM: Smoke, HC, BE, M116, M116E1	Pallet		8	N/A	733	2.24	6.8	D
PROJECTILE, 155-MM: Smoke, Red, BE, M116, M116E1	Pallet		8	N/A	727	2.24	6.55	D
PROJECTILE, 155-MM: Smoke, Yellow, BE, M116, M116E1	Pallet		8	N/A	727	2.24	6.55	D
PROJECTILES, 155-MM: AT M718 and M741	Pallet	None	8	N/A	882	96.8	9.7	B
DUMMY PROJECTILE, 155-MM: M7	Wooden Crate	N/A		N/A	106	N/A	1.98	N/A
CARTRIDGE, 165-MM: HEP, M123, M123A1	Wood box	Fiber container	1	1	92.4	34.4	1.87	A
CARTRIDGE, 165-MM: TP, M623	Wood box	Fiber container	1	1	94	None	1.7	A

See footnotes at the end of this section.

(1) Item	(2) Outer pack	(3) Inner pack	(4) No. items in package	(5) No. items per inner pack	(6)[1] Total weight (lbs)	(7)[1] Total explosive weight (lbs)	(8) Cube	(9)[2] Field storage category
CHARGE, PROPELLING, 175-MM: M86, M86A1 and M86A2 w/Primer, M82	Metal container	None	1	N/A	99	58	3.1	B
CHARGE, PROPELLING, 175-MM: M86A2, w/Additive Jacket	Pallet	Metat container	16	1	1992	928	57.3	B
CHARGE, PROPELLING, 175MM: M124	Metal container	None	3	N/A	95	51	3.1	B
SPACER, CHARGE, PROPELLING, 175-MM: M124	Wirebound box	Barrier bag	1	48	111	0	16.2	N/A
DUMMY PROPELLING CHARGE, 175-MM: M98	Metal container	None	1	N/A	99	None	3.1	N/A
PROJECTILE, 175-MM: HE, M437A1 (M437E1), M437A2 (M437E2)	Pallet		6	N/A	948	190.4	10.6	B
PROJECTILE, 175-MM: HE, M437A2 (Shallow Cavity)	Pallet		6	N/A	948	191	10.6	B
CHARGE, PROPELLING, 8 INCH: Green Bag, M1	Metal container	None	1	N/A	31.2	13.7	1	B
CHARGE, PROPELLING, 8 INCH: Green Bag, M1 w/Primer, Mk 2A4	Metal container	None	1	N/A	31.2	13.7	1.5	B
CHARGE, PROPELLING, 8 INCH: White Bag, M2	Metal container	None	1 2	N/A N/A	51.9 99.6	28.6 57.1	1.6 3.5	B B
CHARGE, PROPELLING, 8 INCH: White Bag, M2 w/ Primer, MK2A4	Metal container	None	1	N/A	53.2	28.6	1.53	B
CHARGE, PROPELLING, 8 INCH: M188	Metal container Pallet	None Metal container	1 20	N/A 1	75 1,700	38.5 770	2.4 61.3	B B
DUMMY PROPELLING CHARGE, 8 INCH: M4	As required		N/A	N/A	N/A	None	N/A	N/A
PROJECTILE, 8 INCH: Gas, Nonpersistent, GB, M426	Pallet		6	N/A	1209	None	12.4	D
PROJECTILE, 8 INCH: Gas, Nonpersistent, GB, M426 w/Burster	Pallet		6	N/A	1250	43.8	12.4	D
PROJECTILE, 8 INCH: Gas, Persistent, VX, M426, W/Burster	Pallet		6	N/A	1250	43.8	12.5	D
PROJECTILE, 8 INCH: Gas, Persistent, VX, M426, w/o Burster	Pallet		6	N/A	1209	None	12.5	D

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CHAPTER 6

SUPPLEMENTARY INPUT DATA TO CHAPTER 6 OF TM 9-1300-251-34

6-1. DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE

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(1) Item No.	(2) SMR code	(3) National stock No.	(4) Part No.	(5) Fed supply code for mfg	(6) Description	(7) Unit of measure	(8) Quantity incorporated in unit
					GROUP: 04 SEMIFIXED AMMUNITION (MORTAR ONLY) — Continued		
					0402: PROJECTILE ASSEMBLY Not applicable.		
					0403: PROPULSION SYSTEM Not applicable.		
					0404: FUZE		
0404-1	XBOOO	8140-00-859-8018	8835934	19203	CONTAINER, AMMUNITION, FIBER: for Fuzes, PD, M525 Series and M527 Series (applicable only to 60- and 81-MM mortar ammunition).	ea	1
0404-2	XBOOO	8140-00-861-2100	8835933	19203	BOX, PACKING, AMMUNITION: for Fuzes, PD, M525 Series and M527 Series (applicable only to 60- and 81-MM mortar ammunition).	ea	1
					GROUP: 05 SEPARATE-LOADING AMMUNITION		
					0501: PROJECTILE ASSEMBLY		
0501-1	XBOOO	8140-00-162-2003	8837839	19203	PALLET, PROJECTILE: for Projectiles 155-MM, and M483A1, M692, M718, M731, M741.	ea	1
0501-2	XBFFF	1320-00-844-6981	75-14-381H	19203	GASKET, SHELL: for Projectiles 155-MM, M116 and M118, 1.73 id, 2.38 od, and 0.13 thk.	ea	1
0501-3	XBFFO	1320-00-861-2098	75-14-42B	19203	PLUG, LIFTING: for Projectiles 155-MM, M116 and M118.	ea	1
0501-4	XBOOO	8140-00-084-0349	76-18-28-1	19203	PALLET, BASE ASSEMBLY: for Projectile 155-MM, M118 Series.	ea	1
0501-5	PAHZZ	1320-00-492-8198	9223427	19203	BURSTER, PROJECTILE: M54, for Projectiles 155-MM, M110 Series.	ea	1
0501-6	XBOOO	8140-00-084-0377	7549275-3	19203	PALLET, BASE ASSEMBLY: for Projectile 155-MM, M107, M110 Series, M116 Series, M121 Series, M485 Series.	ea	1
0501-7	XBOOO	8140-00-560-0463	7549275-4	19203	PALLET, COVER ASSEMBLY: for Projectiles 155-MM, M107, M110 Series, M116 Series, M121 Series, M485 Series.	ea	1
0501-8	XBOOO	8140-01-050-5809	9229038	19203	PALLET, BASE AND COVER: for Projectile, 8 Inch, M509E1	ea	1
0501-9	XBOOO	8140-00-149-0580	76-3-9	19203	CRATE, PACKING: for Dummy Projectile 155-MM M7, and Dummy Projectile, 8 Inch, M14.	ea	1
0501-10	XBOOO	8140-00-144-9908	8857344	19203	PALLET BASE AND COVER: for Projectile, 175-MM, M437 Series.	ea	1
0501-11	XBOOO	8140-00-084-0405	76-18-16-1	19203	PALLET, BASE, ASSEMBLY: for Projectile 8 Inch, M106, M404 and M426.	ea	1
0501-12	XBOOO	8140-00-560-0464	76-18-16-2	19203	PALLET, COVER ASSEMBLY: for Projectiles, 8 Inch, M106, M404 and M426.	ea	1
0501-13	PAFZZ	1320-00-824-0811	8797090	19203	CHARGE, SUPPLEMENTARY ASSEMBLY: (only for projectiles authorized).	ea	1
0501-14	XBFFF	1320-00-077-2140	8860552	19203	GASKET: rubber, for Projectiles, 155-MM, 175-MM, and 8-Inch 1.840 id, 2.190 od and 0.125 thk.	ea	1
0501-15	XBFFO	1320-00-837-2907	10520074	19203	PLUG, LIFTING: for Projectiles 155-MM, 175-MM, and 8-Inch (as authorized).	ea	1
0501-16	XBFFO	1320-00-495-0469	9215390	19203	PLUG, LIFTING, ASSEMBLY, FUSIBLE: for Projectiles 155-MM: M449, M483A1, M692, M718, M731, M741 and 8-Inch: M404, M509E1.	ea	1
0501-17	XBOOO	8140-00-859-7972	10520044	19203	GROMMET: for Projectile, 155-MM; HERA, M549/M549A1	ea	1
0501-18	XBOOO		9235993	19203	ROCKET-OFF CAP: for Projectile, 155-MM: HERA, M549/M549A1	ea	1
0501-19	XBOOO	—	9327882	19203	PALLET, BASE ASSEMBLY: for Projectile 155-MM, M549/M549A1 and XM795.	ea	1

(1) Item No.	(2) SMR code	(3) National stock No.	(4) Part No.	(5) Fed supply code for mfg	(6) Description	(7) Unit of measure	(8) Quantity incorporated in unit
					GROUP 05 SEPARATE-LOADING AMMUNITION — Continued		
					0501: PROJECTILE ASSEMBLY — Continued		
0501-20	XBOOO	—	9327881	19203	PALLET, COVER ASSEMBLY: for Projectile 155-MM M549/M549A1 and XM795	ea	1
0501-21	XBFFO	—	9326791	19203	PLUG, LIFTING: Protective, for Projectile 155-MM, M549/M549A1 and XM795	ea	1
					0502: PROPELLING SYSTEM		
0502-1	XBOOO	8140-00-859-8017	8880528	19203	CONTAINER, AMMUNITION, METAL: M14A2 for Charge, Propelling 155-MM, M31 Series.	ea	1
0502-2	XBOOO	8140-00-864-3221	8880527	19203	CONTAINER, AMMUNITION, METAL: M13A2 for Charge, Propelling, 155-MM, M4 series.	ea	1
0502-3	XBOOO	8140-00-262-9365	9234357	19203	CONTAINER, AMMUNITION, METAL: PA37A1 for Charge, Propelling, 155-MM, M119.	ea	1
0502-4	XBOOO	8140-00-891-6162	8880532	19203	CONTAINER, AMMUNITION, METAL: M460A2 for Charge, Propelling, 175-MM, M86, M98 and M124 Series.	ea	1
0502-5	XBOOO	8140-00-369-9118	8880530	19203	CONTAINER, AMMUNITION, METAL: M18A2 for Charge, Propelling, 8 Inch, M1.	ea	1
0502-6	XBOOO	8140-00-861-2104	8880531	19203	CONTAINER, AMMUNITION, METAL: M19A2 for Charges, Propelling, 8 Inch, M2 and M4.	ea	1
0502-7	XBOOO	—	9275845	19203	CONTAINER, AMMUNITION, METAL: PA66, for Charge, Propelling, 8-Inch, M188	ea	1
0502-8	XBOOO	8140-00-258-8313	9211780	19203	CARTON, PACKING, AMMUNITION: for Additive, Jacket, M1 for Charge, Propelling, 175-MM, M86 Series.	ea	1
0502-9	XBOOO	8140-00-258-8311	9211781	19203	BOX, PACKING, AMMUNITION: for Additive, Jacket, M1 for Charge Propelling, M86 Series.	ea	1
0502-10	XBOOO	8140-00-149-0590	9226295	19203	BOX, WIREBOUND, PACKING, AMMUNITION: for Reducer, Flash Propelling Charge M2.	ea	1
0502-11	XBOOO	8140-00-149-0583	9226294	19203	SHIPPING AND STORAGE CONTAINER: for Reducer, Flash, Propelling Charge, M2.	ea	1
0502-12	XBOOO	8140-00-262-1669	9212310	19203	BOX, PACKING, AMMUNITION: Fiberboard for Reducer, Flash Propelling Charge, XM5.	ea	1
0502-13	XBOOO	8140-00-262-1668	9212311	19203	BOX, PACKING, AMMUNITION: Wood for Reducer, Flash, Propelling Charge, XM5.	ea	1
0502-14	XBOOO	8140-00-827-6268	76-4-56	19203	BOX, PACKING: for Reducer, Flash, Propelling Charge, M3.	ea	1
0502-15	XBOOO	8140-00-262-1666	8796679	19203	BOX, PACKING, AMMUNITION: for Primer, Percussion, M82.	ea	1
0502-16	XBOOO	8140-00-262-1670	8796678	19203	BOX, PACKING, AMMUNITION: Fiberboard for Primer, Percussion M82.	ea	1
0502-17	XBOOO	8140-00-149-0581	8860560	19203	BOX, WIREBOUND, PACKING, AMMUNITION: for Primer, Percussion Mk 2A4.	ea	1
0502-18	XBOOO	8140-00-149-0589	8860559	19203	SHIPPING AND STORAGE CONTAINER: for Primer Percussion Mk2A4.	ea	1
0502-19	XBOOO		9295043	19203	BOX, WIREBOUND, PACKING AMMUNITION: for Spacer, Propelling Charge		1

Footnotes:

1. Included in RPSTL for reference only. Burster M24 is replaceable but will not normally be replaced except for cannibalization due to limited use status of round.

2. Cataloging data for propelling charge XM172 used with 105-mm cartridge XM548E1 will be supplied at a later date.

3. Repair parts for packaging material for all fuzes applicable to separate-loading ammunition. Repair parts for packaging material with the exception of those applicable to M78 and M572 applicable to 4.2 Inch Mortar Ammunition.

4. Repair parts for packaging material for M514 fuze is REPAIR PARTS FOR PACKAGING MATERIAL FOR M513 and M532 fuzes are applicable to mortar ammunition.

APPENDIX A

REFERENCES

A-1. ARMY REGULATIONS

Report of Transportation Discrepancies in Shipments	AR 55-38
Malfunctions Involving Ammunition and Explosives	AR 75-1
DA Supplement to DOD 5200-1-R, "Information Security Program Regulation"	AR 380-5
Fire Report	AR 385-12
Accident Reporting and Records	AR 385-40
Regulations for Firing Ammunition for Training, Target Practice, and Combat	AR 385-63
Packaging Improvement Report	AR 700-58

A-2. BLANK FORMS

Accident Report	DA Form 285
Record of Injury	DA Form 1051
Recommended Changes to Publications and Blank Forms	DA Form 2028
Fire Report	DA Form 3985
Report of Packaging & Handling Deficiencies	DD Form 6
Discrepancy in Shipment Report	SF 361

A-3. DOCTRINAL, TRAINING, AND ORGANIZATIONAL PUBLICATIONS

Ammunition and Explosives Standards	TM 9-1300-206

Organizational Maintenance Manual (Including Repair Parts and Special Tools Lists): Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launchers	TM 9-1300-251-20
Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools Lists): Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launchers	TM 9-1300-251-34
Operator's Manual for Howitzer, Medium, Self Propelled: 155mm, M109A2	TM 9-2350-303-10
Operator's Manual for Howitzer, Medium, Self Propelled: 155mm: M109/M109A1	TM 9-2350-217-10N
Operator's Manual for Howitzer, Medium, Towed: 155mm: M198	TM 9-1025-211-10
Operator's Manual for Howitzer, Medium Towed: 155mm: M114A2	TM 9-1025-200-12
The Army Maintenance Management System (TAMMS)	TM 38-750
Army Ammunition Data Sheets for Artillery Ammunition: Guns, Howitzers, Mortars, Recoilless Rifles, and Grenade Launchers	TM 43-0001-28
Destruction of Conventional Ammunition and Improved Conventional Ammunition to Prevent Enemy Use	TM 750-244-5-1
Operator's and Organizational Maintenance for Fuze, Point Detonating: M739	DEP 9-1390-417-12
Operator's and Organizational Maintenance for Fuze, Proximity: M732	DEP 9-1390-420-12

APPENDIX B

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

B-1. GENERAL

a. The Maintenance Allocation Chart designates responsibility for the performance of maintenance functions.

b. Only the lowest level of maintenance authorized to perform a maintenance function is indicated.

c. A maintenance function assigned a maintenance level will automatically be authorized to be performed at any higher maintenance level.

d. A maintenance function that cannot be performed at the assigned level of maintenance for any reason may be evacuated to the next higher maintenance organization. Higher maintenance levels will perform the maintenance functions of lower maintenance levels when required or directed by the appropriate commander.

B-2. MAINTENANCE FUNCTIONS

The implementation of maintenance tasks will be consistent with the assigned maintenance in accordance with the following definitions:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination.

b. Test. To verify serviceability and to detect incipient failure by ballistics of an item and comparing those characteristics with prescribed

standards.

c. Service. Operations required periodically to keep an item in proper operating condition.

(1) Unpack. To remove item from packing box for service or for the performance of other maintenance operations.

(2) Repack. To return item to packing box after service or other maintenance operations.

(3) Clean. To rid the item of contamination.

(4) Touch Up. To spot paint scratched or blistered surfaces.

(5) Mark. To restore obliterated identification.

d. Install. To emplace, seat or fix into position an item in a manner to allow the proper functioning of the equipment; also, to assemble one component of an end item with another.

e. Adjust. To maintain within prescribed limits by bringing into proper or exact position, or by setting the operating characteristics to the specified parameters.

f. Renovate. To restore item to serviceable condition.

(1) Paint. To repaint the entire item.

(2) Repair. To restore serviceability to an item by correcting specific damage, fault, malfunction, or failure through the application of maintenance services or other maintenance actions.

(3) Replace. To substitute a serviceable component in a manner to allow the proper functioning of equipment.

B-3. EXPLANATION OF FORMAT

a. Group Number. Column 1 lists the group numbers which identify components and assemblies with the next higher assembly.

b. Functioning Group. Column 2 lists the item names of parts and assemblies on which maintenance is authorized.

c. Maintenance Function. Column 3 lists the twelve maintenance functions defined in C-2 above. Capital letters are inserted under appropriate maintenance functions, on line with each functional group, to indicate the lowest level of maintenance authorized to perform that function. Symbols used and the maintenance category each represents are as follows:

Symbol	Explanation
C	Operator/Crew
O	Organizational
F	Direct Support
D	Depot

Section II. MAINTENANCE ALLOCATION CHART

(1)	(2)	(3)												(4)	(5)
		Maintenance function													
				Service							Renovate				
Group No.	Functional group	Inspect	Test	Unpack	Repack	Clean	Touch up	Mark	Install	Adjust	Paint	Repair	Replace	Tools and equipment	Remarks
0501	Projectile														
	a. Projectile Assembly	C	D	C	O	C	O	O	C	-	F	D	-		
	b. Projectile	D	D	-	-	D	D	-	-	-	D	-	-		
	c. Lifting Plug	C	-	F	O	C	O	-	C	-	F	F	F		
	d. Pallet	C	-	F	F	O	-	O	-	-	F	F	O		
	e. Lifting Plug Gasket	F	-	F	F	F	-	-	-	-	-	-	F		
	f. Projectile Grommet	C	-	F	F	C	-	-	-	-	-	-	C		
	k. Fuze Well Liner	D	-	D	D	-	-	-	-	-	-	-	D		
	l. Pallet	C	-	F	F	O	-	O	-	-	F	F	O		
	m. Lifting Plug Gasket	F	-	F	F	F	-	-	-	-	-	-	F		
	n. Projectile Grommet	C	-	F	F	C	F***	-	-	-	F***	-	C****		
	o. Obturating Band	D	-	D	D	C	-	-	-	-	-	-	D		

***Metal Type Only

**** Parts Salvaged From Expended

APPENDIX C

Parts List For XM795

TDPL No. 9312769

DWG NO.	REV.	DATE	TITLE
F 9312769 (2 Shts)	-	790214	Projectile, 155mm: HE, XM795 Loading Assembly and Marking Liner
C 9328391	-	790214	Liner
F 9329574 (2 Shts)	-	790214	Packing and Marking for Pallet, Wood Ammunition for Projectile 155mm HE XM795
F 9326054	-	790214	Body Assembly
C 9326052	-	790214	Blank, Rotating Band
C 9326051	-	790214	Cover Base
F 9326055	-	790214	Projectile, 155mm, HE XM795 Metal Parts Assembly
F 9326053 (2 Shts)	-	790214	Body Machined
F 9280267	-	790214	Ultrasonic Inspection STD Longitudinal & Radial Cracks XM795 Body
F 9280268	-	790214	Ultrasonic Inspection STD Circumferential Cracks & Piping XM795 Body
A 9280269 (6 Shts)	-	790214	Envelope Drawing, Ultrasonic Inspection Equipment & Procedures for Body, Machined 155mm XM795

Parts List For XM795 — Continued

DWG NO.	REV.	DATE	TITLE
Associated Dwgs:			
B 9327806	-	780501	Gasket, Energy Absorbing Lifting Plug
B 9326791	-	780501	Plug, Lifting, Energy Absorbing
F 9251527	L	780322	Grommet for - 155MM Projectiles
C 10542907	H	750829	Obturator

SPECIFICATION	DATE	TITLE
DOD-P-63245	10 Jan 79	Projectile, HE, 155mm XM795 Metal Parts Assembly
DOD-P-63252	29 Jan 79	Projectile, 155mm, HE, XM795 Loading, Assy and Packing
DOD-L-63317	31 Jan 79	Liner for Shallow Cavity Loaded Projectile

Associated Specs:

MIL-A-2550	MIL-P-63268	QQ-A-250/2
MIL-B-20292	MIL-S-50783	UU-T-81
MIL-C-16173	MIL-T-248	TT-I-1795
MIL-C-21567	MIL-STD-1168	ANSI Y 14.5
MIL-E-52891	MIL-STD-171	ANSI Y 14.36
MIL-G-48090	FED-STD-595	ANSI B 46.1
MIL-I-6868	O-T-634	ASTM A 711
MIL-L-11195	L-P-393	ASTM A 109
MIL-O-60540	QQ-S-781	ASTM A 366
MIL-P-22332	QQ-A-250/1	ASTM A 602

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