

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

UNIT LEVEL MAINTENANCE INFORMATION
ON CARTRIDGE, 40MM: DUMMY, M922A1

Headquarters, Department of the Army, Washington, DC
10 May 1993

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this bulletin. If you find any mistakes or know of a way to improve the procedures, please let us know. Mail your DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to Commander, U.S. Army Armament, Research, Development and Engineering Center, ATTN: SMCAR-LSB, Picatinny Arsenal, New Jersey 07806-5000. A reply will be furnished to you.

		<u>Paragraph</u>	<u>Page</u>
SECTION I.	INTRODUCTION		
	Purpose.....	1	1
	General	2	1
SECTION II.	INFORMATION AND PROCEDURES TO BE INCORPORATED INTO UNIT/MAINTENANCE TECHNICAL MANUALS		
	General	3	2
	Type Classification, Use, Description, Functioning, and Tabulated Data	4	2
	Markings	5	4

SECTION I. INTRODUCTION

1. Purpose. The purpose of this bulletin is to provide supplemental unit level maintenance information on Cartridge, 40MM: Dummy, M922A1. This dummy cartridge is used as a drill round to train users in handling ammunition and loading the MKI9 series grenade machine gun and the M129 grenade launcher.

2. General. This bulletin contains data that will be incorporated into the following ammunition and weapon technical manuals:

a. TM 43-0001-28 Army Ammunition Data Sheets for Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, Grenade Launchers, and Artillery Fuzes.

b. TM 9-1300-251-20 Unit Maintenance Manual (Including Repair Parts and Special Tools List) for Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40MM Grenade Launchers.

c. TM 9-1300-251-34 Direct Support and General Support Maintenance (Including Repair Parts and Special Tools List) for Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40MM Grenade Launchers.

SECTION II. INFORMATION AND PROCEDURES TO BE INCORPORATED INTO UNIT/MAINTENANCE TECHNICAL MANUALS

3. General. The information on the 40mm dummy cartridge M922A1 (fig. 1) in the following paragraphs will be incorporated as changes to the affected manuals.

4. Type Classification, Use, Description, Functioning, and Tabulated Data.

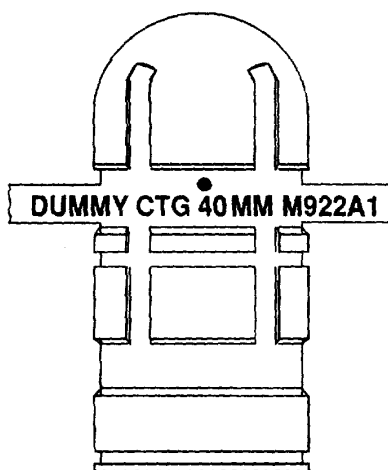
- a. Type Classification. Std LCC-A, 31 Mar 93; MSR TBD.
- b. Use. This dummy cartridge is used as a drill round to train users in handling ammunition and loading the MK19 series grenade machine gun and the M129 grenade launcher.
- c. Description. This cartridge is completely inert and simulates a loaded round of 40mm HE ammunition in size, shape, and weight. This fixed round is a one piece solid aluminum round. There is no separate cartridge case. Four grooves allow easy repositioning of M16A2 link after being cycled through the weapon. There is a hole in the base to prevent damage to the firing pin. The entire round is gold in color.
- d. Functioning. This cartridge is completely inert and nonfunctional.
- e. Tabulated Data.

Complete round:

Type	Dummy
Weight	350 gr (0.77 lb)
Length	4.42 in.
Weapons used with.....	M129 40mm grenade launcher, MK19 Mod 3 grenade machine gun

Projectile:

Body material.....	Bar alloy aluminum
Color	Gold with black markings



U
AR6030

Figure 1. Cartridge, 40MM: Dummy, M922A1

Propelling charge:
 Cartridge case None
 Propellant None
 Primer None

Performance:
 Maximum range N/A
 Muzzle velocity..... N/A

Temperature limits:

Firing:
 Lower limit N/A
 Upper limit..... N/A

Storage:
 Lower limit N/A
 Upper limit..... N/A

M2A1 pack:
 NSN 1310-01-369-4705

Inner pack (metal box):
 NSN 8140-00-960-1699
 Item number 0101
 SMR code XBOOO
 Part number 7553296
 FSC 19200
 Unit of measure ea
 Quantity incorporated
 in unit 1
 *Packing 20 rounds, 2-10
 rounds in linked
 belts

Packing drawing
 number..... 9362530

Outer pack (wirebound box):
 NSN N/A
 Item number 0101
 SMR code XBOOO
 Part number 9362530
 FSC 19200
 Unit of measure ea
 Quantity incorporated
 in unit 1
 *Packing box - 2 supplied:
 Weight 291b
 Dimensions 14.63 x 12.81 x
 9.13 in.
 Cube 1 cu ft
 Total explosive weight N/A
 Field storage category A
 M2A1 metal container
 drawing number 7553296

M548 pack:
 NSN 1310-01-368-7104
 Inner pack (packing fillers):
 *Packing 48 rounds in
 linked belt
 Packing drawing
 number 9362543

Outer pack (metal box):
 NSN 8140-00-739-0233
 Item number..... 0101

SMR code XBOOO
 Part number 7258943
 FSC..... 19200
 Unit of measure ea
 Quantity incorporated
 in unit 1
 *Packing box:
 Weight 601b
 Dimensions 18-19/32 x
 14-19/32 x
 8-19/64 in.
 Cube 1.3 cu ft
 Total explosive weight . N/A
 Field storage category . A
 M548 metal container
 drawing number 7258943

PA120 pack:
 NSN 1310-01-369-1902
 Inner pack (packing fillers):
 *Packing 32 rounds in
 linked belt

Packing drawing
 number 12928042

Outer pack (metal box):
 NSN 8140-01-316-9143
 Item number 0101
 SMR code XBOOO
 Part number 12564414
 FSC..... 19200
 Unit of measure ea
 Quantity incorporated
 in unit 1
 *Packing box:
 Weight 42 lb
 Dimensions 18.76 x 10.39 x
 6.36 in.
 Cube 0.7 cu ft
 Total explosive weight . N/A
 Field storage category . A
 PA120 metal container
 drawing number 12564414

Shipping and Storage Data:
 Quantity-distance class N/A
 Storage compatibility
 group N/A
 DOT shipping class N/A
 DOT designation N/A
 DODAC 1310-B472
 DODIC B472

Maintenance functions:
 Group number 0101
 Functional group a, b, c, d, e, f
 Cartridge drawing number .. 12937903

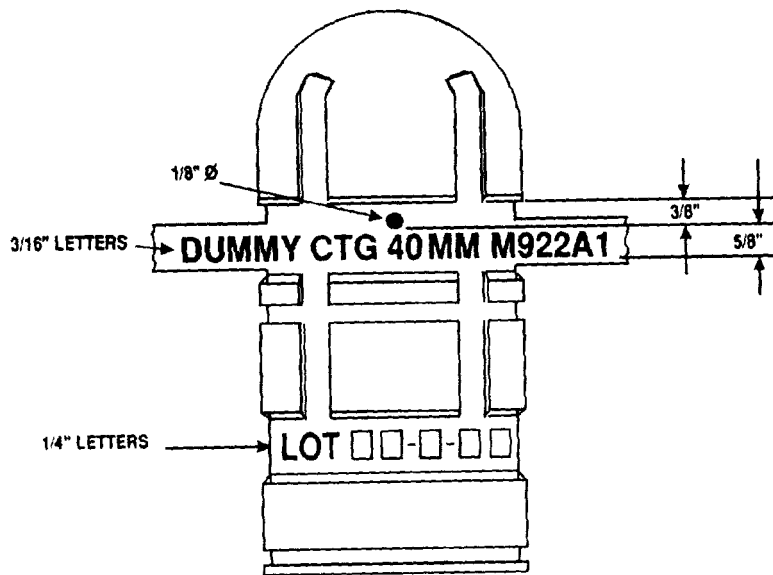
*NOTE: See SC for complete packing data including NSN's.

References:

- SB 700-20
- SC 1305130-IL
- TB 9-1310-247-12
- TM 9-1010-230-10
- TM 9-1010-230-23&P
- TM 9-1300-251-20
- TM 9-1300-251-34

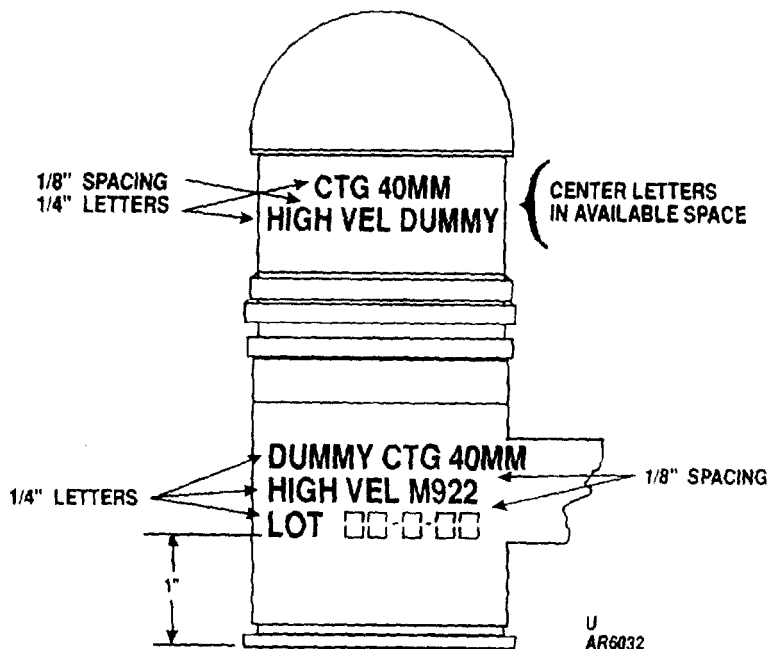
5. Markings.

Marking for the 40mm dummy cartridge M922A1 is shown in-figure 2. Marking for the 40mm dummy cartridge M922 is shown in figure 3.



U
AR6031

Figure 2. Typical marking for 40mm dummy cartridge M922A1.



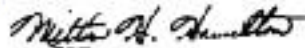
U
AR6032

Figure 3. Typical marking for 40mm dummy cartridge M922.

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army
Chief of Staff

Official:




MILTON H. HAMILTON
Administrative Assistant to the
Secretary of the Army
04251

Distribution:

To be distributed in accordance with DA Form 12-40-E, Block 1059, requirements for TB 9-1300-279-12.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

 <div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block; margin-left: 20px;"> <p style="margin: 0;"><i>THEN...JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL.</i></p> </div>		SOMETHING WRONG WITH PUBLICATION	
		FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)	
PUBLICATION NUMBER		DATE SENT	
PUBLICATION DATE		PUBLICATION TITLE	
BE EXACT PIN-POINT WHERE IT IS			
PAGE NO.	PARA- GRAPH	FIGURE NO.	TABLE NO.
<div style="text-align: center; font-weight: bold; margin-bottom: 20px;">IN THIS SPACE, TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT.</div> <div style="border: 1px dashed black; width: 20%; margin: 0 auto; height: 10px;"></div>			
PRINTED NAME, GRADE OR TITLE AND TELEPHONE NUMBER			SIGN HERE

The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 decagram = 10 grams = .35 ounce
 1 hectogram = 10 decagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

Temperature (Exact)

°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C
----	------------------------	----------------------------	---------------------	----

PIN: 071385-000