

URGENT

MWO effective date is 15 January 2003 and completion date is 30 April 2003

MWO 9-1015-250-30-2

MODIFICATION WORK ORDER

MODIFICATION OF:
MORTAR, 120MM: TOWED M120
(NSN: 1015-01-226-1672) (EIC: 4SL)
AND
MORTAR, 120MM: CARRIER MOUNTED M121
(NSN: 1015-01-292-3801) (EIC: 4SE)

HEADQUARTERS, DEPARTMENT OF THE ARMY, WASHINGTON, D.C.

15 March 2003

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this MWO. If you find any mistakes or if you know of a way to improve these procedures, please let us know. Submit DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the Internet on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeeps.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using the form on AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax, or e-mail your letter or DA Form 2028 direct to AMSTA-LC-CI/TECH PUBS, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The e-mail address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or (commercial) 309-782-0726.

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MWO 9-1015-250-30-2

1. PURPOSE. To place warning decals in conspicuous locations on the M120 and M121 Mortars, and within the mortar carrier itself. These warning decals are designed to attract the attention of mortar crews and to serve as a reminder of the need to correctly position the safety mechanism during weapon operations. The decals provide crews with an immediate, visual means of instruction to positively identify and confirm that the safety mechanism of the mortar has been placed in the “SAFE” position prior to attempting to remove a misfired 120mm cartridge.

2. PRIORITY. The modification is classified as **URGENT**. Application is required to be performed within the required timeframe – NOT LATER THAN 30 APRIL 2003.

3. END ITEMS(S) or SYSTEM(S) to be MODIFIED.

<u>Nomenclature</u>	<u>NSN</u>	<u>P/N</u>	<u>FSCM</u>	<u>Serial Numbers</u>
Mortar, 120MM: Towed M120	1015-01-226-1672	12576880	19206	All
Mortar, 120MM: Carrier-Mounted, M121	1015-01-292-3801	12900890	19206	All

4. MODULE(S), COMPONENTS, ASSEMBLIES, BOARDS AND CARDS TO BE MODIFIED.

The following items, whether installed or in PLL/ASL or depot stock, shall be modified.

<u>Nomenclature</u>	<u>NSN</u>	<u>FSCM</u>	<u>P/N</u>	<u>Location (see note)</u>
Extractor, Cartridge	1015-01-433-4471	19206	12901167	Mortar BII
Step, Platform	1015-01-387-0584	19206	12901121	Mortar Turntable
Rack Assembly, Rifle	1095-01-347-7609	19207	12381826	Mortar Carrier
Rack, Ammunition, Storage	2590-01-354-5431	19207	12369618	Mortar Carrier

Note:

- Mortar COEI = Component of End Item of M120 and M121 Mortar
- Mortar BII = Basic Issue Item of M120 and M121 Mortar
- Mortar Turntable = Item is located on turntable within mortar carrier
- Mortar Carrier = Item is component of mortar carrier

5. PARTS TO BE MODIFIED. Not Applicable.

6. APPLICATION:

a. Time Compliance: The effective date of this MWO is 15 January 2003 and completion date is NOT LATER THAN 30 April 2003.

b. Level of Maintenance: Direct Support (DS) maintenance is the lowest level of maintenance authorized to perform this modification.

c. Work force and man-hour requirements:

<u>Work Force/Skills</u>	<u>Man-Hours</u>	<u>Man-Hours W/O Disassembly</u>
1 Small Arms Repairman (MOS 45B) or other MOS as designated by applying activity	0.3 – 0.5 hours	0.3 – 0.5 hours

d. MWOs to be applied prior or concurrent with this MWO: None.

e. Additional information: Not applicable.

7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED AS A RESULT OF THIS MWO:

A Technical Bulletin (TB 9-1015-250-30-1, Warning Decals for Mortar, 120mm: Towed M120 (NSN: 1015-01-226-1672) (EIC: 4SL) and Mortar, 120mm: Carrier Mounted M121 (NSN: 1015-01-292-3801) (EIC: 4SE) will be issued for sustainment of these decals.

8. MWO KIT(S)/PART(S) AND THEIR DISPOSITION.

a. Kit needed to apply the MWO:

<u>Nomenclature</u>	<u>NSN</u>	<u>FSCM</u>	<u>P/N</u>
Modification Kit: Warning Decals for M120/M120 Mortar, 120mm	1015-01-M98-0406	19200	5944389

b. Contents of MWO Kit:

<u>Item</u>	<u>Nomenclature</u>	<u>NSN</u>	<u>FSCM</u>	<u>P/N</u>	<u>Qty</u>
1	Decal, Warning (Step and Racks)	None	19200	13001229	4
2	Decal, Warning (Extractor, Cartridge)	None	19200	13001228	4
3	Wipes, Alcohol	None	19200	13002007	5
4	Graphical Training Aid: (120mm Mortar misfire procedure)	None	19200	13002078	4

c. Bulk and Expendable Material. The following additional items may be required. All items specified below are authorized expendable/durable items for the 120mm mortar.

<u>Item</u>	<u>Nomenclature</u>	<u>NSN</u>	<u>P/N</u>	<u>UI</u>
1	Rag, Wiping, Cotton	7920-00-205-1711	A-A-2522	EA
2	Solvent, Dry Cleaning	6850-00-281-1985	A-A-711	GL

d. Parts disposition. There are no parts/components removed/replaced as the result of this MWO. If MWO kits in excess of requirements remain after completion of application, contact TACOM-Rock Island for disposition instructions. Telephone DSN 793-3229 or commercial 309-782-3229. Email to amsta-lc-cfsm@ria.army.mil.

e. Mandatory Replacement Parts. Not applicable.

9. SPECIAL TOOLS; TOOL KITS; JIGS; TEST, MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE); AND FIXTURES REQUIRED. Not applicable.

10. MODIFICATION PROCEDURES.

WARNING

Dry cleaning solvents (SD), alcohol swabs, and paint thinners are highly flammable. Do not clean parts near an open flame or in a smoking area. Dry cleaning solvents and paint thinners evaporate quickly and have a drying effect on the skin. Do not use these solvents without protective gloves.

Solvents used in this procedure produce toxic vapors. Do not use in confined areas and always ensure adequate ventilation is available. Avoid long periods of breathing toxic vapors and contact with the skin.

When handling strong cleaning solvents, always wear safety glasses and/or chemical splash goggles and know where nearest eye wash station is located.

For first aid data, see FM 21-11.

NOTE

There is only one MWO kit. Determine which mortar system you'll be working on. The M121 Mortar is mounted in the M1064 series Mortar Carrier. All warning decals in the kit are required. The M120 Mortar is mounted on a M1100 Trailer. The four (4) warning decals provided for the turntable step and racks (see item 2, paragraph 8b, above) will not be required.

NOTE

All areas where decals are to be applied must be free of excess oil and dirt. Cleaning with dry cleaning solvent and rags may be required (see paragraph 8c, above). Inspect all locations for decals and clean as appropriate prior to starting this modification.

a. Inventory MWO Kit Contents.

(1) **Large Warning Decal.** Four each approximately 5 by 4 inches. They are “peel off” style decals. They are used on the turntable step, on two of the ammunition racks, and on the rifle rack.

(2) **Small Warning Decal.** Four each approximately 1 - 7/8 inches square. They are “peel off” style decals. Three are used on the cartridge extractor. One will be excess.

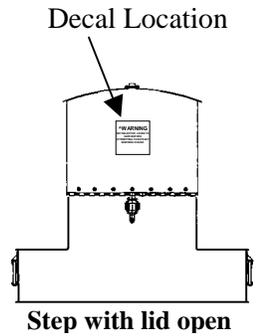
(3) **Graphical Training Aid (GTA) Cards.** Four each. These are the same size as the large warning decals. They are printed on heavy plastic card stock and have printing on both sides. The GTA cards are for the mortar crew.

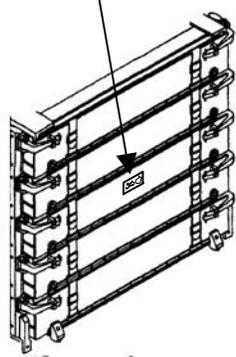
(4) **Alcohol Wipes.** Five each. These are packed in a tear-open package approximately 2 inches square.

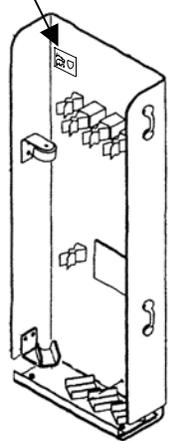


Figure 1 - Typical Warning Decal

b. Following four decals are applicable to M121 Mortar only.

<p>(1) Step, Platform. Applicable to M121 Mortar only. The step is located on the turntable of the M1064 series Mortar Carrier. One (1) decal will be applied.</p> <p>(a) Open lid of step. With alcohol towelette provided in kit, clean an area in the approximate middle of the underside of the lid. Area cleaned must be large enough to accommodate the decal to be applied. Allow surface to dry completely before applying decal.</p> <p>(b) Locate proper decal. Peel off backing and carefully apply decal. Apply firm pressure over surface of decal. Attempt to eliminate all trapped air pockets under the decal to ensure proper adhesion.</p>	<p>Decal Location</p>  <p>Step with lid open</p>
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<p>(2) Rack, Ammunition. Applicable to M121 Mortar only. There are three (3) ammunition racks located inside of the M1064 series Mortar Carrier. Apply decal to one rack on each side of the carrier.</p> <p>(a) With alcohol towelette provided in kit, clean an area in the approximate middle of the center access cover of each rack selected for decal application. Area cleaned must be large enough to accommodate the decal to be applied. Allow surface to dry completely before applying decal.</p> <p>(b) Locate proper decal. Peel off backing and carefully apply decal. Apply firm pressure over surface of decal. Attempt to eliminate all trapped air pockets under the decal to ensure proper adhesion.</p>	<p>Decal Location (one of two)</p> 
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<p>(3) Rack, Rifle. Applicable to M121 Mortar only. The rifle rack is located in front of the turntable in the M1064 series Mortar Carrier. One (1) decal will be applied.</p> <p>(a) With alcohol towelette provided in kit, clean an area in the upper left portion of the rifle rack. Area selected should be visible if/when rifles and sight extension are stowed. Area cleaned must be large enough to accommodate the decal to be applied. Allow surface to dry completely before applying decal.</p> <p>(b) Locate proper decal. Peel off backing and carefully apply decal. Apply firm pressure over surface of decal. Attempt to eliminate all trapped air pockets under the decal to ensure proper adhesion.</p>	<p>Decal Location</p> 
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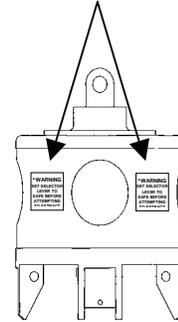
c. Following decal is applicable to both the M120 and M121 Mortars.

Basic Issue Item - Cartridge Extractor. Every mortar has a Cartridge Extractor as part of its Basic Issue Items. It is cylindrical, approximately 6.25 inches high and 4.25 inches in diameter. Locate this Cartridge Extractor and perform the following steps.

(a) Locate three (3) areas between the large 1.5 inch holes on side of extractor body. With alcohol towelette provided in kit, clean the three (3) areas. **DO NOT USE PART NUMBERED AREA. USE THE OTHER THREE AREAS FOR DECAL PLACEMENT.** Areas cleaned must be large enough to accommodate the decals to be applied.

(b) Locate proper decal. Peel off backing. Carefully apply three (3) decals. Apply firm pressure over surface of decal. Attempt to eliminate all trapped air pockets under the decal to ensure proper adhesion.

Decal Location
(2 of 3 shown)



d. **Graphical Training Aid (GTA) Cards.** The last item in the modification kit is the GTA. These are laminated cards. The GTA cards are for mortar crewmembers. These cards should be provided to the crew when the weapon is returned.

11. CALIBRATION REQUIREMENTS. Not applicable.

12. WEIGHT AND BALANCE DATA: Weight and balance are not affected.

13. QUALITY ASSURANCE REQUIREMENTS: Inspect in accordance with general quality assurance requirements contained in TM 750-245-4.

14. RECORDING AND REPORTING OF THE MODIFICATION:

a. The organization responsible for application will report application information as follows:

(1) Reporting will be accomplished by electronic means. MWO application information can be input directly into the Modification Management Information System (MMIS) over the Internet. Entry into the MMIS system is password protected. New users can register on-line at <http://www.mmis-mwo.com/mwo/>. Passwords are normally approved and issued within 48 hours.

(2) Submission will be comprised of the 15 data elements listed in table 9. Elements 1, 2, 6, 7, 8 & 12 are given for this MWO (as shown). The person reporting the MWO data will acquire the remaining elements (3, 4, 5, 9, 10, 11, 13, 14 & 15), and input all 15 into MMIS.

	Data Element	Input Data
1	MCN	1-02-05-0012
2	MWO Number	9-1015-250-30-2
3	UIC (BN level)	
4	Unit Name	
5	Unit Location	
6	NSN of End Item (Old)	1015-01-226-1672 (M120) or 1015-01-292-3801 (M121)
7	NSN of End Item (New)	N/A
8	Registration Number	N/A
9	Date of Application	
10	Man-Hours Required for Application	
11	Applied by (name)	
12	Software Version	N/A
13	Serial Numbers (<i>see NOTE below</i>)	
14	Your e-mail address	
15	Comments	

NOTE

Item 13 – Serial Number. Be sure to note and record only the serial number of the mortar. This is located on the cannon and breech cap. Do not report carrier serial number or bumper number.

All 120mm mortar serial numbers are five (5) numbers and will be in the form of 10xxx or 11xxx. The five (5) numbers may or may not be followed by the letter “T”.

b. Marking of Equipment. Not required.

c. Identification Data. Not applicable.

15. MATERIAL CHANGE NUMBER (MCN): 1-02-05-0012.

16. MODIFICATION IDENTIFICATION: End items which have been modified can be identified by inspecting for warning decals as described in this MWO.

By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON

*Administrative Assistant to the
Secretary of the Army*

0228401

ERIC K. SHINSEKI
*General, United States Army
Chief of Staff*

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 401146, requirements for MWO 9-1015-250-30-2.

