

NORMAL

MWO effective date is 1 December 1987 and completion date is 31 December 1996

MWO 9-2350-255-20-4

MODIFICATION WORK ORDER

MODIFICATION OF TANK, COMBAT, FULL-TRACKED

105-MM GUN, M1 (2350-01-061-2445)

Headquarters, Department of the Army, Washington DC

25 June 1987

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. Write a letter or complete and mail a DA Form 2026, Recommended Changes to Publications and Blank Forms, to: Commander, U.S. Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAS, Rock Island, IL 61299-6000. A reply will be provided to you.

1. PURPOSE

The purpose of this modification work order is to provide wiring harnesses with improved moisture protection performance and reliability.

2. PRIORITY.

This modification is classified NORMAL.

Approved for public release; distribution is unlimited.

Change 1

CHANGE

NO. 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, D. C., 1 December 1993

MODIFICATION OF TANK COMBAT, FULL-TRACKED:

105-MM GUN, M1 (2350-01-061-2445)

MWO 9-2350-255-20-4, dated 25 June 1987, is changed as follows:

1. Remove old pages and insert new pages as indicated below.
2. New or changed material is indicated by a vertical bar in the margin of the page.
3. This MWO is changed as a result of additional parts distribution direction and vehicle application serial numbers.

Remove Pages

1 and 2

Insert Pages

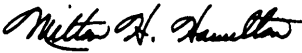
1 and 2

File this change sheet in back of the publication for reference purposes.

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
05537

DISTRIBUTION:

To be distributed in accordance with DA Form 12-37-E, block 1545 requirements for MWO 9-2350-255-20-4.

3. END ITEM(S) OR SYSTEM(S) TO BE MODIFIED.

See table 1.

Table 1. End Item(s) to be Modified

Nomenclature	NSN	Part Number and CAGE	Model Number	serial Number
Tank, Combat, Full-Tracked: 105-MM Gun, M1	2350-01-061-2445	8750014 (19207)	M1	0001 thru 1031

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

Not applicable.

5. PART(S) TO BE MODIFIED.

Not applicable.

6. APPLICATION.

NOTE

Check paragraph 16 to see if all or part of this modification has already been accomplished. If the intent of the MWO has been completed, go to paragraph 14.

- a. *Time Compliance Schedule:* The effective date of this MWO is 1 December 1987 and its completion date is 31 December 1996.
- b. *Lowest Level of Maintenance Authorized to Apply this MWO:* Unit maintenance.
- c. *Work Force and Man-hour Requirements for Application of this MWO to a Single Unit, End Item, or System is as follows:*

REQUIREMENTS

WORK FORCE/SKILLS

MAN-HOURS

Tank Turret Mechanic (MOS 45E) or Equivalent Personnel	2.1
Tank Auto Mechanic (MOS 63E) or Equivalent Personnel	2.1

Total man-hours required for a single application of this MWO is 4.2 hours.

- d. *MWO's to be Applied Prior to or Concurrently with the Application of this MWO:* Not applicable.
- e. *Additional Information Deemed Necessary to Assist in the Application of this MWO:* Not applicable.

7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED.

The following publications require change as a result of this MWO:

<u>TM NUMBER</u>	<u>DATE</u>
TM 9-2350-255-20P-1	June 1986
TM 9-2350-255-20P-2	June 1986
TM 9-2350-255-34P-1	June 1986
TM 9-2350-255-34P-2	June 1986
TM 9-2350-255-20-2-3-1	August 1984 w/ Change 2
TM 9-2350-255-20-1 -3-6	October 1983 w/ Change 5

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

a. *Kit(s)/Part(s) Needed to Apply this MWO:*

(1) The kit shown in table 2 is required to accomplish this MWO.

Table 2. Kit and Security Classification

NSN	Nomenclature	Part Number and CAGE	Security Classification
TBD	Vehicle Kit, Hull and Turret, Electrical Wiring Harness	12345645 (19200)	Unclassified

(2) Kit shipping data is shown in table 3.

Table 3. Shipping Data

Part Number	Weight	Dimensions	Cubic Displacement
12345645	24.0 lbs.	8.6 X 56.1 X 4.7 inches	2268.0 inches

b. *Contents of MWO Kit(s):* See table 4 and figure 1.

Table 4. Vehicle Kit 12345645

Nomenclature	NSN	Part Number and CAGE	Qty	Figure & Item No.
Wiring Harness Kit (Hull)	None	12345427 (19207)	1	
Composed of:				
Wiring Harness (2W102)	2920-01-181-6534	12316257 (19207)	1	1, 1
Lockwasher	5310-00-550-1130	MS35333-40 (96906)	2	1, 2
Lockwasher	5310-00-576-5752	MS35333-39 (96906)	4	1, 3
Wiring Harness Kit (Turret)	None	12548044 (19200)	1	
Composed OE				
Wiring Harness (1W100)	1015-01-210-3717	12316264 (19200)	1	1, 4
Lockwasher	5310-00-550-1130	MS35333-40 (96906)	3	1, 5
Lockwasher	5310-00-576-5752	MS53333-39 (96906)	4	1, 6

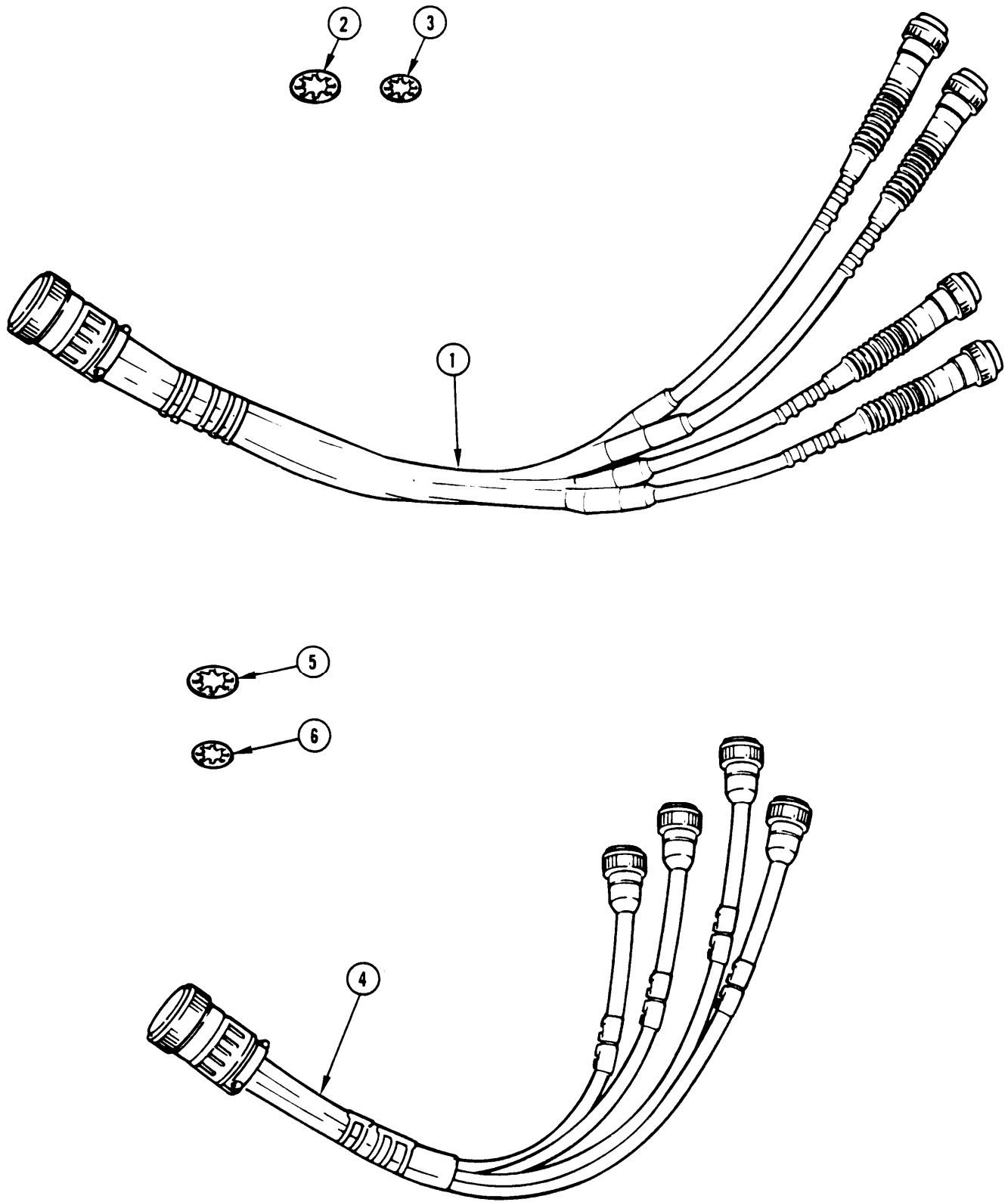


Figure 1. Vehicle Kit

c. *Bulk and Expendable Material*: See table 5.

Table 5. Bulk and Expendable Material

Nomenclature	NSN	Part Number and CAGE	Quantity
Lubricating Oil, preservative, (PL-S)	9150-00-231-6689	VV-L-800 (81348)	QT
Pencil, writing	7510-00-189-7881	A-A-976 (58536)	EA
Sealing Compound, Type II, Grade N	8030-01-025-1692	MIL-S-46163 (05972)	CC
Tag, Type A, Grade 3	8135-00-292-2342	UU-T-81 (81348)	BX

d. *Parts Disposition*: Turn in excess parts listed in table 6 in accordance with AR 710-2, AR 735-11, and local policy.

Table 6. Excess Parts

Nomenclature	NSN	Part Number and CAGE	Quantity
Wiring Harness	1015-01-076-6781	12287200 (19207)	1
Wiring Harness	2590-01-073-0135	12287232 (19200)	1

9. SPECIAL TOOLS; TOOL KITS; JIGS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND FIXTURES REQUIRED.

See table 7.

Table 7. Special Tools and Tool Kits

Nomenclature	NSN	Part Number and CAGE	Quantity
Tool Kit, artillery and turret mechanic's	5180-00-357-7727	SC 5180-95-CL-A12 (19204)	1
Tool Kit, general mechanic's auto	5180-00-177-7033	SC 5180-90-CL-N26 (50980)	1
Shop Equipment, auto-maint and repair common	4910-00-754-0650	SC 4910-95-CL-A72 (19204)	1

10. MODIFICATION PROCEDURES.

- a. *Remove Wiring Harness Assembly 1W100, 12287200 (TM 9-2350-255-20-2-3-1).*
- b. *Install Wiring Harness Assembly 1W100, 12316264 (TM 9-2350-255-20-2-3-1).*
- c. *Remove Branched Wiring Harness Assembly 2W102, 12287232 (TM 9-2350-255-20-1-3-6).*
- d. *Install Branched Wiring Harness Assembly 2W102, 12316257 (TM 9-2350-255-20-1-3-6).*

11. CALIBRATION REQUIREMENTS.

Not applicable,

12. WEIGHT AND BALANCE DATA.

Weight and balance are not significantly affected.

13. QUALITY ASSURANCE REQUIREMENTS.

a. General: The following information is supplied to insure the proper application of this modification.

b. Physical inspection: Check components that were removed or installed during the modification for security of mounting. Inspect wiring harness assemblies for proper and neat routing.

c. Functional test: After installation into the tank, perform functional test according to PMCS of TM 9-2350-255-10.

14. RECORDING AND REPORTING OF THE MODIFICATION.

a. Records and reports: Record the modification in accordance with AR 750-10, DA PAM 738-750, DA PAM 738-751, and TB 9-1100-803-15.

b. Marking Equipment: Not applicable.

c. Identification Data: Not applicable.

15. PRODUCT IMPROVEMENT PROPOSAL (PIP) NUMBER.

This MWO is authorized by PIP number 1-85-05-4074.

16. MODIFICATION IDENTIFICATION.

After modification the part number of turret harness 1W100 will be 12316264 and the part number of hull harness 2W102 will be 12316257.

By Order of the Secretary of the Army:

CARL E. VUONO
General United States Army
Chief of Staff

Official:

R. L. DILWORTH
Brigadier General United States Army
The Adjutant General

DISTRIBUTION:

To be distributed in accordance with DA Form 12-37, Unit Maintenance requirements for Tank, Combat, Full Tracked, 105-MM, M1 Abrams.

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN...JOT DOWN THE
DOPE ABOUT IT ON THIS FORM.
CAREFULLY TEAR IT OUT, FOLD IT
AND DROP IT IN THE MAIL.

SOMETHING WRONG WITH PUBLICATION

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

PUBLICATION DATE

PUBLICATION TITLE

BE EXACT PIN-POINT WHERE IT IS

PAGE
NO.

PARA-
GRAPH

FIGURE
NO.

TABLE
NO.

IN THIS SPACE, TELL WHAT IS WRONG
AND WHAT SHOULD BE DONE ABOUT IT.

TEAR ALONG PERFORATED LINE

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 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 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

To change	To	Multiply by	To change	To	Multiply by
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

