

# ROUTINE

MWO effective date is 1 October 2000 and completion date is 1 September 2003.

MWO 9-1005-319-30-1

## MODIFICATION WORK ORDER

---

### MODIFICATION OF M16A2 RIFLE

(NSN 1005-01-128-9936)(EIC:4GM)

---

Headquarters, Department of the Army, Washington, DC

26 December 2000

#### 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 the procedures, please let us know. Submit your DA Form 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeps.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the 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, DA Form 2028, or DA Form 2028-2 direct to: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CIP-WT, Rock Island, IL 61299-7630. The email address is [TACOM-TECH-PUBS@ria.army.mil](mailto:TACOM-TECH-PUBS@ria.army.mil). The fax number is DSN 793-0726 or Commercial (309) 782-0726.

**DISTRIBUTION STATEMENT C:** Distribution authorized to U.S. Government agencies and their contractors. This publication is required for administration and operational purposes, as determined on 1 May 1998. Other requests for this document shall be referred to Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-LC-CSIR, Rock Island, IL 61299-7630.

**DESTRUCTION NOTICE:** Comply with distribution statement and destroy by any method that will prevent disclosure of contents or reconstruction of the document.

- 1. PURPOSE.** The purpose of this modification is to convert the M16A2 Rifle to the M16A4 Rifle.
- 2. PRIORITY.** This modification is classified ROUTINE.

DIGITIZED FOR  
YOUR REVIEW AT  
[WWW.SMALLARMSOFTHEWORLD.COM](http://WWW.SMALLARMSOFTHEWORLD.COM)

SSA  
WWW

**3. END ITEMS(S) OR SYSTEM(S) TO BE MODIFIED.**

**Table 1. End Item to be Modified**

<b>Nomenclature</b>	<b>NSN</b>	<b>Part Number</b>	<b>CAGEC</b>	<b>Model</b>
Rifle	1005-01-128-9936	9349000	19204	M16A2

**4. MODULE(S) (COMPONENTS, ASSEMBLIES, SUBASSEMBLIES) TO BE MODIFIED.** Not applicable.

**5. PART(S) TO BE MODIFIED.** Not applicable.

**6. APPLICATION.**

**a. Time compliance schedule.** The effective date of this MWO is October 2000 and its completion date is September 2003.

**b. Level of maintenance.** The lowest level of maintenance authorized to apply this MWO is Direct Support.

**c. Work Force and Man-Hour Requirements for Application of this MWO to a Single Unit, End Item or System are as follows:**

**Table 2. Application Requirements**

<b>ASSEMBLY/SUBASSEMBLY</b>	<b>WORK FORCE/SKILLS</b>	<b>MAN HOURS</b>
M16A4 Modification Kit	MOS: One – 45 Bravo	.25*

\*Total man-hours required for a single application of this MWO is .25 hours.

**d. MWOs 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:**

TM 9-1005-319-10	Operator's Manual for M16A2, M16A3, M16A4 Rifles, and M4/M4A1 Carbines
TM 9-1005-319-23&P, C1-C6	Unit and Direct Support Maintenance Manual for M16A2, M16A3, M16A4 Rifles and M4/M4A1 Carbines

**7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED.** The following technical publications are affected or changed as a result of this MWO:

<b><u>PUBLICATION NUMBER</u></b>	<b><u>DATE</u></b>
TM 9-1005-319-10	September 1998
TM 9-1005-319-23&P	May 1991

**8. MWO KIT(S)/PART(S) AND THEIR DISPOSITION.****a. Kits needed to Apply this MWO:**

(1) The kit listed in table 3 is required to accomplish this MWO.

**Table 3. Kits and Security Classification**

<b>Nomenclature</b>	<b>NSN</b>	<b>P/N</b>	<b>CAGEC</b>	<b>Security Classification</b>
Upper Receiver and Barrel Assembly	1005-01-454-0395	12973010	19200	Unclassified

(2) Kit shipping data is shown in table 4.

**Table 4. Shipping Data**

<b>Part Number</b>	<b>Weight</b>	<b>Dimensions</b>	<b>Cubic Displacement</b>
12973010	6 lbs	30"x10"x6"	1.04 cu.ft.

**b. Contents of MWO Kit:** See table 5.

**Table 5. M16A4 Modification Kit**

<b>Nomenclature</b>	<b>NSN</b>	<b>P/N</b>	<b>CAGEC</b>	<b>Quantity</b>
Upper Receiver and Barrel Assembly	1005-01-454-0395	12973010	19200	1

**c. Bulk and Expendable Material:** See table 6.

**Table 6. Bulk and Expendable Material**

<b>Nomenclature</b>	<b>NSN</b>	<b>P/N</b>	<b>CAGEC</b>	<b>Quantity</b>
Lubricant, Solid Film	9150-01-260-2534	MIL-L-23398	81349	AR

**MWO 9-1005-319-30-1**

**d. Part Disposition:** Retain the excess parts listed in table 7 for possible future use. Do not turn in or dispose of unless unserviceable or in condition code F.

**Table 7. Excess Parts**

<b>Nomenclature</b>	<b>NSN</b>	<b>P/N</b>	<b>CAGEC</b>
Upper Receiver Assembly		9349062	19200
Barrel Assembly	1005-01-146-7684	9349124	19200

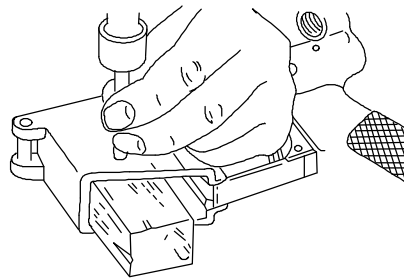
**9. SPECIAL TOOLS; TOOL KITS; JIGS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND FIXTURES REQUIRED.** Special tools and tool kits required to apply this MWO are listed in table 8.

**Table 8. Special Tools and Tool Kits**

<b>Tool Kit</b>	<b>NSN</b>	<b>P/N</b>
Shop Set, Small Arms: Field Maintenance, Basic Less Power	4933-00-754-0664	SC 4933-95-CL-A11

**10. MODIFICATION PROCEDURES: M16A4 Modification Kit**

**a.** Stamp the lower receiver to read "M16A4". If the lower receiver must be refinished, this stamping will take place prior to the refinish operation. If refinish is not required, the areas stamped must be touched-up with solid film lubricant. Support the receiver in the stamping area to prevent bending and distortion of the receiver. Overstamp the "2" in M16A2 with an X and to the right of the X, stamp a "4" to read M16AX4, using the same size number stamps as the original number.



**b.** Remove the M16A2 Rifle handguards per TM 9-1005-319-10, steps 2-4, wp 0013 00-1 and inspect in accordance with TM 9-1005-319-23&P, paragraph 2-7, item 3, page 2-8.

**c.** Completely remove M16A2 rifle upper receiver and barrel assembly from the lower receiver assembly per TM 9-1005-319-10, steps 6-8, wp 0013 00-2.

**d.** Remove bolt carrier assembly and charging handle assembly from the M16A2 rifle upper receiver and barrel assembly and inspect in accordance with TM 9-1005-319-23&P, paragraph 2-7, item 5, page(s) 2-12 and 2-13. Set M16A2 upper receiver and barrel assembly aside.

**e.** Install M16A2 rifle bolt carrier assembly and charging handle assembly to the M16A4 rifle upper receiver and barrel assembly.

**f.** Headspace the M16A4 rifle in accordance with TM 9-1005-319-23&P, paragraph 3-10, steps 7-11, page 3-47.

**g.** Install the M16A4 rifle modification kit (upper receiver and barrel assembly) with the headspaced bolt assembly to the lower receiver assembly in accordance with TM 9-1005-319-10, steps 15-17, wp 0017 00-11.

**h.** Install handguards to the M16A4 rifle in accordance with TM 9-1005-319-10, steps 18-20, wp 0017 00-13.

**11. CALIBRATION REQUIREMENTS.** Not Applicable.

**12. WEIGHT AND BALANCE DATA.** Not Applicable.

**13. QUALITY ASSURANCE REQUIREMENTS.** Not Applicable.

**14. RECORDING AND REPORTING OF THE MODIFICATION.**

**a. Records and reports.** Record and report accomplishment of the modification in accordance with DA PAM 738-750, The Army Maintenance Management System (TAMMS). A DA Form 2407 shall be completed and submitted within three working days of accomplishment of the modification. Specific instructions for use of DA Form 2407 to report a modification are contained in paragraph 3-8 and figure 3-12 of DA PAM 738-750. After completion, copies of DA Form 2407 will be distributed as follows:

(1) Copy 1: Retained by using unit.

(2) Copy 2: Commander  
TACOM-Rock Island  
ATTN: AMSTA-LC-CIP-WM  
Rock Island, IL 61299-7630

(3) Copy 3: Retained by unit.

**b. Marking equipment.** Not applicable.

**c. Identification data.** The M16A4 rifle is a standard M16A2 rifle with a flat top upper receiver and detachable carrying handle. The flat top upper receiver has an integral rail that will be utilized (when the carrying handle is removed) to mount optical devices to the weapon. There are no differences between the internal dimensions of the M16A2 rifle and the M16A4 rifle.

**15. MATERIEL CHANGE (MC) NUMBER.** Not applicable.

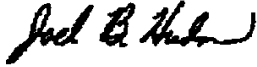
**16. MODIFICATION IDENTIFICATION.** Not applicable.



**By Order of the Secretary of the Army:**

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

*Official:*



**JOEL B. HUDSON**  
*Administrative Assistant to the  
Secretary of the Army*  
0030605

**DISTRIBUTION:** To be distributed in accordance with the initial distribution requirements for IDN:  
401148 for MWO 9-1005-319-30-1

PIN: 078670-000