

ROUTINE

MWO effective date is Apr 96 and completion date is May 00.

MODIFICATION WORK ORDER

**MODIFICATION OF MACHINE GUN, 5.56MM, M249
(NSN 1005-01-127-7510)**

Headquarters, Department of the Army Washington, DC

1 June 1996

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. Mail your letter or DA Form 2028, Recommended Changes to Publications and Blank Forms, to Director, Armament and Chemical Acquisition and Logistic Activity (ACALA), ATTN: AMSTA-AC-NML, Rock Island, IL 61299-7630. A reply will be provided to you.

DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government agencies and their contractors on a need-to-know basis. This determination was made on 27 March 1996. Other requests for this document will be referred to Director, Armament and Chemical Acquisition and Logistic Activity (ACALA), ATTN: AMSTA-AC-NML, Rock Island, IL 61299-7630.

DESTRUCTION NOTICE. Destroy by any method that will prevent disclosure of contents or reconstruction of the document.

1. PURPOSE. The purpose of this modification is to reduce the incidents of failure to feed malfunctions particularly on tracer rounds by the use of a modified bolt. The new bolt has an angle machined into the bolt face to aid in the proper feeding of the ammunition into the chamber of the barrel. The modification replaces the present bolt with a modified bolt. Under this MWO a units' prescribed load list/authorized stockage list (PLUASL) bolts must also be swapped.

2. PRIORITY. This modification is classified ROUTINE.

3. END ITEM OR SYSTEM TO BE MODIFIED. Machine Gun, 5.56MM, M249 (NSN 1005-01-127- 7510). Serial Number Range: All weapons less than 40000 and greater than 91000.

4. MODULE(S) (COMPONENTS, ASSEMBLIES, SUBASSEMBLIES, BOARDS, AND CARDS) TO BE MODIFIED. Not applicable.

5. PARTS TO BE MODIFIED. Bolts in prescribed load list/authorized stockage list (PLL/ASL) must be swapped.

6. APPLICATION.

a. Time compliance schedule: This MWO is effective April 1996 and the completion date is May 2000.

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

c. The total man-hours required for a single application of this MWO is 0.1 hours.

7. TECHNICAL PUBLICATIONS AFFECTED/CHANGED. TM 9-1005-201-23&P/TM 08671A-23&P/2A/TO 11 W3-5-5-52.

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

a. All parts needed to apply MWO. Not applicable.

b. Contents of MWO kits are listed in table 1.

TABLE 1

NSN	Nomenclature	Quantity	Part No. And CAGEC
1005-01-408-7920	Modification Kit, Gun, Weapon, Bolt Assembly	1	12557024 (19200) consisting of:
1005-01-392-6194	Bolt, Breech	1	12540412 (19200)
1005-01-383-0168	Parts Kit, Gun*	1	12557025 (19200) consisting of:
N/A	Extractor, Cartridge	1	12540400 (19200)
N/A	Pin, Extractor	1	9350086 (19200)
N/A	Spring, Helical	1	9348415 (19200)
N/A	Pin, Straight	1	9348416 (19200)

* This item is preassembled to the Bolt, Breech - 12540412.

c. Bulk and expendable material. Not applicable.

d. Parts disposition. Turn in old bolt assembly to the ACALA representative or bulk ship to: FN Manufacturing Inc., 797 Clemson Rd., ATTN: FNIO 108 DODAAC: CMALH3, Columbia, SC 29203. Include a completed DD Form 1348-1 with the shipment.

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

10. MODIFICATION PROCEDURES.

- a. Unpack the Modification Kit.
- b. Inspect modification kit for completeness, Bolt Assembly body for damage, and extractor for proper functioning.

Note

The M249 SAW now has a replacement requirement for the Extractor group of the bolt assembly. The bolt assembly provided with this MWO has had the extractor group replaced by the factory. This should be the start of the period for replacement of the Extractor group.

- c. Clear the weapon as follows:

- (1) Charge weapon (pull cocking handle to the rear). Be sure bolt is locked in rear position. Push charging handle forward until you hear it click.

- (2) Push safety to right (red band not visible).

- (3) Squeeze latches and open cover assembly.

- (4) If present, remove ammo belt, loose links or magazine.

- (5) Raise feed tray and look into chamber and receiver cavity. Assure chamber is empty and cavity is free of rounds or spent cases.

- (6) With left hand, open magazine well cover by pushing inward, and check for rounds or spent cases.

- (7) Close cover assembly.

- (8) Push safety to left (red band visible). Pull cocking handle to rear and hold, depress trigger and ride bolt forward to close and lock.

- d. Remove OLD bolt assembly as follows:

WARNING

Be sure bolt is in forward position before removing drive spring.

- (1) Pull the upper grooved pin at the rear of the receiver to the left to release the buttstock.
- (2) Let the buttstock pivot downward so that the rear opening on receiver is completely free.
- (3) By holding weapon with one hand on the buttstock, simultaneously push in and upward on the rear end of return rod and transfer assembly with thumb of other hand. The return rod and transfer assembly is now released from positioning groove inside receiver. Withdraw the return rod and transfer assembly and spring.
- (4) Pull the cocking handle rearward, sliding the piston, slide and OLD bolt assembly out the rear of the receiver. Remove OLD bolt assembly from slide assembly.

e. Remove barrel assembly as follows:

- (1) Assure folding handle on new style barrel assembly is in carrying (up) position.
- (2) Depress locking lever of the barrel with left hand. Hold carrying handle with the right hand, lift up and push the barrel forward.

f. Inspect new bolt assembly for proper headspace using the following procedures:

NOTE

Both barrel assemblies (weapon and spare) that accompanied the weapon must be checked for proper headspace.

- (1) Insert tapered end of headspace gage into barrel.

CAUTION

Forcing the bolt closed will harm the gage and give an incorrect reading.

- (2) Insert NEW bolt into barrel and (with slight pressure) attempt to lock bolt (by rotating to the left) with headspace gage installed.
- (3) Barrel and bolt are considered to have proper headspace if bolt DOES NOT lock into barrel with headspace gage installed. If the bolt seems to lock, but more resistance is felt than without the gage in place, headspace is correct.

g. Depress the locking lever with left hand. Holding the carrying handle with the right hand, pull the barrel rearward, push downward and lock by releasing barrel locking lever.

- h. Install NEW bolt assembly into slide assembly.
- i. Install piston, slide, and bolt assembly into receiver. Pull trigger so that the sear does not prevent the moving parts from going forward.
- j. Hold the pistol grip with one hand and push the return rod and transfer mechanism assembly into its housing in the rear of the piston with the other. With the thumb of that hand, press in and down on the rear of the assembly until its two lugs are positioned in the receiver grooves.
- k. Pivot the buttstock and buffer upward into position and push the retaining pin, to the right. Close the cover assembly.

11. CALIBRATION REQUIREMENTS. Prior to MWO application, a headspace gage (9350102) calibrated in accordance with TB 43-180, Calibration and Repair Requirements for the Maintenance of Army Materiel and TB 43-180 Inspection and Calibration of Small Arms Gages should be available.

12. WEIGHT AND BALANCE DATA Not significantly affected.

13. QUALITY ASSURANCE REQUIREMENTS. Submit Quality Deficiency Report (QDR) on SF 368 upon discovery of discrepancy to Commander, HQ, ARDEC, ATTN: AMSTA-AR-QAW-A (R), Rock Island, IL 61299-7300.

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), Standard Army Maintenance System (SAMS). A DA Form 2407/5504 shall be completed and submitted within 3 days of accomplishment of modification. Specific instructions for use of DA Form 2407/5504 to report a modification are contained in DA Pam 738-750. In addition copy 2 of DA Form 2407/5504 shall be forwarded to:

Director
ACALA
ATTN: AMSTA-AC-NMR
Rock Island, IL 61299-7630

- b. Marking equipment. Not applicable.
- c. Identification data. Not applicable.

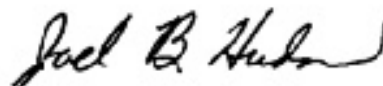
15. MATERIEL CHANGE (MC) NUMBER. This MWO is authorized by MC number 1-95-05-7916.

16. MODIFICATION IDENTIFICATION. Not applicable.

By Order of the Secretary of the Army:

DENNIS J. REIMER
General, United States Army
Chief of Staff

Official



JOEL B. HUDSON

Administrative Assistant to the
Secretary of the Army

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