ROUTINE

MWO effective date is 1 June 1997 and its completion date is 31 May 2001.

MWO 9-2350-314-20-9

MODIFICATION WORK ORDER

MODIFICATION OF HOWITZER, MEDIUM, SELF-PROPELLED: 155MM, M109A6 (NSN 2350-01-305-0028) (EIC: 3FC)

Headquarters, Department of the Army, Washington, D.C.

22 October 1997

REPORTING OF 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, direct to Director, Armament and Chemical Acquisition and Logistics Activity, ATTN: AMSTA-AC-NMLI, Rock Island, IL 61299-7630. A reply will be provided to you.

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1. **PURPOSE.** The pulse accumulator is mounted to the hydraulic compartment wall of the Ml09A6 Self-Propelled Howitzer with a mounting plate and two loop clamps. Fatigue has caused the current loop clamps to break. The unrestrained accumulator has damaged other hydraulic components. This MWO prescribes procedures for replacing the current mounting plate and loop clamps with a new bracket and new clamps. The new loop clamps will resist breaking better than the old ones.

2. **PRIORITY.** This modification is classified ROUTINE.

3. **END ITEM(S) OR SYSTEM(S) TO BE MODIFIED.** See Table 1.

Table 1. End Item or System to be Modified.

NOMENCLATURE	NSN	PART NO.	MODEL	CAGEC	SERIAL NO. RANGE
Howitzer, Medium, Self-Propelled: 155MM	2350-01-305-0028	12553195	Ml09A6	19200	I-570

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

5. **PARTS TO BE MODIFIED.** Not applicable.

6. **APPLICATION.**

a. Time Compliance Schedule: MWO effective date is 1 June 1997 and completion date is 31 May 2001.

b. Level of Maintenance: Unit maintenance is the lowest level of maintenance authorized to apply this MWO.

c. Work Force and Man-hour Requirements.

REQUIREMENTS

WORK FORCE/SKILLS	MAN-HOURS	MAN-HOUR W/O DISASSEMBLY
Armament Repairer (MOS 45D)	1.0 hour	.75 hour

d. MWOs to be Applied Prior to or Concurrently with this MWO. Not applicable.

e. Additional Information. None.

7. **TECHNICAL PUBLICATIONS AFFECTED/CHANGED.**
TM 9-2350-314-20-2
TM 9-2350-314-24P-2

8. **MWO KIT(S)/PART(S) AND THEIR DISPOSITION.**
a. Kit(s)/Part(s) Needed to Apply the MWO. See Table 2.

Table 2. Kits/Parts Required.

NOMENCLATURE	NSN	CAGEC	PART NO.	QTY	ITEM NO.
Washer, Lock	5310-00-637-9541	96906	MS35338-46	2	11
Mounting Plate	TBD	19200	12979847	1	13
Clamp, Loop	TBD	19200	12979848	2	14

b. Contents of MWO Kits. Not applicable

c. Bulk and Expendable Material. See Table 3

Table 3. Bulk and Expendable Material

NOMENCLATURE	NSN	CAGEC	PART NO.	QTY
Nitrogen	6830-00-292-0131	81348	BB-N-411	As Req

d. Parts Disposition. Parts no longer required are listed in Table 4 and will be disposed of per local disposal instructions.

Table 4. Parts Disposition

NOMENCLATURE	N S N	CAGEC	PART NO.	QTY	ITEM NO.
Clamp, Loop	5340-01-384-4708	19200	12927661	2	7
Mounting Plate	5340-01-384-4687	19200	12927660	1	9
Nut, Plain	5310-00-761-6882	96906	MS51967-2	4	*
Screw, Cap	5305-00-068-0508	80204	B1821BH025C 07SN	4	*
Washer, Flat	5310-00-809-4058	96906	MS27183-10	8	*
Washer, Lock	5310-00-582-5965	96906	MS35338-44	4	*
Washer, Lock	5310-00-637-9541	96906	MS35338-46	2	11

* Fasteners attaching clamp loops (7) to mounting plate (9).

9. **SPECIAL TOOLS; TOOL KITS; JIGS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT.** None.

10. MODIFICATION PROCEDURES.

a. Removal of Loop Clamps and Mounting Plate

WARNING

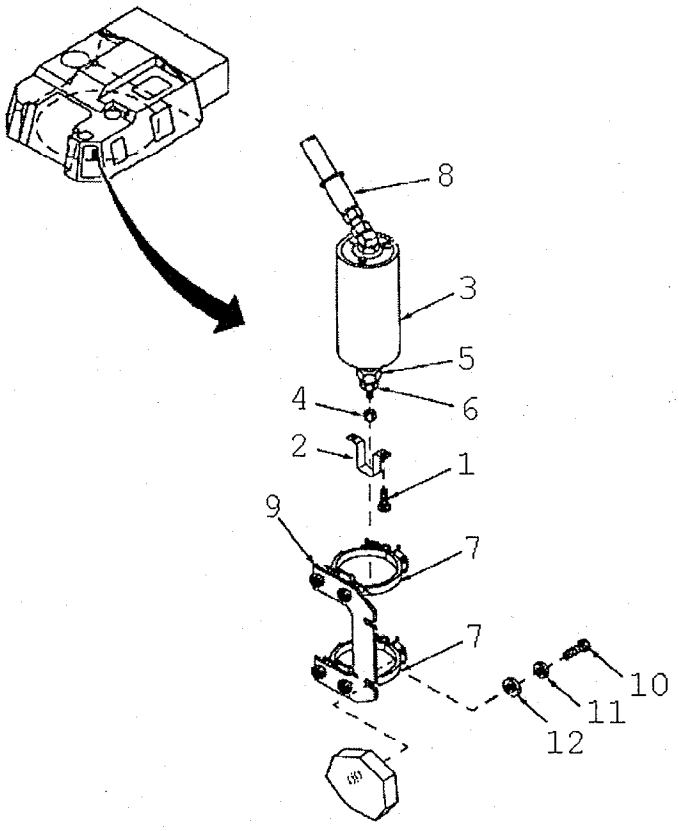
- Before beginning this modification, verify that the MASTER power switch is in the OFF position and the battery ground leads are disconnected. Failure to switch the MASTER power switch OFF and disconnect the battery ground leads can lead to serious personal injury if the pulse accumulator or tools contact electrical terminals located in the hydraulic compartment.

- Hydraulic system pressure is 1925 ± 50 psi. Do not loosen, remove, or torque hydraulic components when the hydraulic system is pressurized. Discharge the system pressure before performing any modification or maintenance procedures. Failure to discharge the system pressure could result in serious injury to personnel. Refer to TM 9-2350-314-20-2-2, paragraph 18-1, for discharging the hydraulic system. Wear gloves and goggles to prevent personal injury.

(1) Open the hydraulic compartment access door.

WARNING

The pulse accumulator is charged to 900 ± 50 psi. Use caution when relieving pressure. Wear gloves and goggles to prevent personal injury.



(2) Remove two screws (1) and guard (2) from pulse accumulator (3).

(3) Remove valve cap (4) from charging valve (5), and slowly turn the charging nut valve (6) counterclockwise to relieve nitrogen pressure in pulse accumulator (3). After the pulse accumulator is discharged, thread the valve cap back on the charging valve.

(4) Loosen the screw and release the latch on each loop clamp (7).

(5) With hose (8) still connected, remove pulse accumulator (3) from loop clamps (7). Support the pulse accumulator while mounting plate (9) and loop clamps (7) are replaced.

(6) Remove two screws (10), two lockwashers (11), two flat washers (12), and mounting plate (9), with loop clamps (7) still attached, from the hydraulic compartment wall. Set the two lock washers and mounting plate, with two loop clamps still attached, aside for disposition per para 8.