

# ROUTINE

MWO effective date is 30 Aug 02 and completion date is 30 Aug 05.

MWO 9-2320-386-20-1

## AIR PRESSURE RELIEF VALVE KIT MODIFICATION WORK ORDER

### MODIFICATION OF 2 1/2-TON ESP 6X6, M44A3 SERIES TRUCKS (DIESEL)

NOMENCLATURE	MODEL	NSN	EIC
Truck, Cargo, Fixed Side, without Winch	M35A3	2320-01-383-2047	BHK
Truck, Cargo, Fixed Side, with Winch	M35A3	2320-01-383-3850	BHL
Truck, Cargo, Long Wheelbase, without Winch	M36A3	2320-01-383-2048	BHM
Truck, Cargo, Long Wheelbase, with Winch	M36A3	2320-01-383-2046	BHN
Truck, Cargo, Dropside, without Winch	M35A3C	2320-01-383-2050	BHP
Truck, Cargo, Dropside, with Winch	M35A3C	2320-01-383-2049	BHQ

HEADQUARTERS, DEPARTMENT OF THE ARMY, WASHINGTON, D.C.  
17 June 2004

#### REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. 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 (Recommended Changes to Publications and Blank Forms), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeprs.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 or DA Form 2028 direct to: AMSTA-LC-CI Tech Pubs, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The email address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

**1. PURPOSE.**

The purpose of this modification is to add a back-up air pressure relief valve to the vehicle air system.

**2. PRIORITY.**

This modification is classified as ROUTINE.

**3. END ITEM TO BE MODIFIED.**

2 1/2-Ton, 6X6, M44A3 series trucks.

<b>NOMENCLATURE</b>	<b>MODEL</b>	<b>NSN</b>	<b>EIC</b>	<b>PART NO.</b>	<b>CAGEC</b>
Truck, Cargo, Fixed Side, w/o Winch	M35A3	2320-01-383-2047	BHK	8750343	19207
Truck, Cargo, Fixed Side, with Winch	M35A3	2320-01-383-3850	BHL	8750342	19207
Truck, Cargo, Long Wheelbase, w/o Winch	M36A3	2320-01-383-2048	BHM	8750347	19207
Truck, Cargo, Long Wheelbase, with Winch	M36A3	2320-01-383-2046	BHN	8750346	19207
Truck, Cargo, Dropside, w/o Winch	M35A3C	2320-01-383-2050	BHP	8750345	19207
Truck, Cargo, Dropside, with Winch	M35A3C	2320-01-383-2049	BHQ	8750344	19207

**4. MODULES TO BE MODIFIED.**

Not applicable to this MWO.

**5. PARTS TO BE MODIFIED.**

Not applicable to this MWO.

**6. APPLICATION.**

- a. Time compliance schedule: MWO effective date is (30 Aug 02) and completion date is (30 Aug 05).
- b. The lowest level of maintenance authorized to apply this MWO is unit maintenance.
- c. Work force and man-hour requirements for application of this MWO to a single unit, end item, or system are as follows:

<b>REQUIREMENTS</b>	
<b>WORK FORCE/SKILLS</b>	<b>MAN-HOURS</b>

1 Wheeled-Vehicle Mechanic (MOS 63B) or equivalent	0.5 Hours
---	-----------

Total man-hours required for a single application of this MWO is 0.5 hours.

- d. There is no other MWO that must be applied prior to application of this MWO.
- e. There is no additional information necessary to apply this MWO.

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

<u>Technical Publication</u>	<u>Date</u>
TM 9-2320-386-24	01 May 2001
TM 9-2320-386-24P	01 May 2001

**8. MWO KITS, PARTS, AND THEIR DISPOSITION.**

- a. The following kit is required to accomplish this modification. The security classification of the kit is unclassified. Shipping data (estimated) are:

WEIGHT: 1 lb. MEASUREMENTS: 4.5-in. x 4.5-in. x 2.25-in. VOLUME: n/a

<u>NOMENCLATURE</u>	<u>NSN</u>	<u>CAGEC</u>	<u>PART NO.</u>
AIR PRESSURE RELIEF VALVE KIT	4820-01-490-1773	19207	57K3636

- b. The Air Pressure Relief Valve Kit component parts are listed below. This listing is used to inventory the kit for completeness.

<u>NOMENCLATURE</u>	<u>NSN</u>	<u>CAGEC</u>	<u>PART NO.</u>	<u>QUANTITY</u>
Valve, air pressure relief	4820-01-478-3710	OUKB6	WHMBN1178DF	1
Tee	4730-01-028-5036	27315	44Q236D35	1
Fitting	4730-01-489-0917	93061	68CA-10-8	1
Bushing Pipe	4730-01-465-4457	81343	8-4 130140B	1

- c. Bulk and expendable material used to apply the Air Pressure Relief Valve Kit are listed below.

<u>NOMENCLATURE</u>	<u>NSN</u>	<u>CAGEC</u>	<u>PART NO.</u>	<u>QUANTITY</u>
Sealant, Pipe, Teflon	8030-01-218-0321	02570	MS-PTS-50	1

- d. Parts Disposition. All kit parts not used during installation will be returned to stock for disposition in accordance with AR 725-50. Once removed from the vehicle, dispose of the following part in accordance with local disposal regulations.

<u>NOMENCLATURE</u>	<u>NSN</u>	<u>CAGEC</u>	<u>PART NO.</u>	<u>QUANTITY</u>
Elbow, Pipe to Tube	4730-01-078-4317	81343	10-8 120202BA	1

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

Hand tools required to apply this MWO are contained in the tool kit listed below.

<u>NOMENCLATURE</u>	<u>NSN</u>	<u>CAGEC</u>	<u>PART NO.</u>	<u>QUANTITY</u>
Tool Kit, Gen Mechanic's	5180-00-177-7033	50980	SC 5180-90-CL-N26	1

## 10. MODIFICATION PROCEDURES.

- a. Vehicle Preparation.
  - (1) Set parking brake. (Refer to TM 9-2320-386-10.)
  - (2)
  - (3) Chock wheels. (Refer to TM 9-2320-386-10.)
  - (4) Drain air reservoirs. (Refer to TM 9-2320-386-10.)
  - (5) Raise and secure hood. (Refer to TM 9-2320-386-10.)

- b. Air Pressure Relief Valve Installation. \_\_\_\_\_

### **WARNING**

Do not disconnect air lines before draining air reservoirs. Small parts under pressure may shoot out with high velocity, causing injury to personnel. Eyeshield must be worn when releasing compressed air. Failure to do so may result in injury to personnel.

### **CAUTION**

When disconnecting air lines and hoses, plug all openings to prevent dirt from entering and causing damage to internal parts. Remove all plugs prior to installation.

#### **Removal** (see figure 1)

- (1) Remove main air line (2) from air compressor outlet elbow (3).
- (2) Remove air compressor outlet elbow (10-8 120202BA) (3) from air compressor (1) and set aside for disposition per paragraph 8.

### **NOTE**

When applying pipe sealant, ensure that the first two starter threads are clear of pipe sealant.

#### **Installation** (see figure 2)

- (3) Install tee (44Q236D35) (1) in air compressor (4) with outlet holes facing toward the front and rear of the vehicle.

### **NOTE**

When applying pipe sealant, ensure that the first two starter threads are clear of pipe sealant.

- (4) Apply teflon pipe sealant to the male threads of adapter (68CA-10-8).
- (5) Install adapter (68CA-10-8) (3) in rear outlet hole of tee (44Q236D35).

**NOTE**

Main air line may need to be repositioned to install on fitting.

- (6) Install main air line (2 ) on adapter (68CA-10-8) (3).
- (7) Install relief valve reducer (8-4 130140B) (6) in front outlet hole of tee (44Q236D35).
- (8) Apply teflon pipe sealant to the male threads of relief valve reducer (8-4 130140B).
- (9) Install air pressure relief valve (WHMBN1178DF) (5) in relief valve reducer (8-4 130140B) (6).

**11. CALIBRATION REQUIREMENTS.**

Not applicable to this MWO.

**12. WEIGHT AND BALANCE DATA.**

Weight and balance are not significantly affected by this MWO.

**13. QUALITY ASSURANCE REQUIREMENTS.**

- a. **General.** The following information is supplied to ensure the proper application of this modification and to provide clarification in regard to the adequacy of the installer's inspection methods and procedures applicable to quality assurance. The procedures include, but are not limited to, installer responsibilities, Government verification, and in-process and workmanship inspections. Inspections shall be in accordance with TM 750-245-4.
- b. **Installer Responsibilities.** The installer is responsible for compliance with the quality assurance requirements specified herein. These requirements and the installer's plan of inspection, or quality program, constitute the minimum examinations and tests necessary to assure compliance with established requirements. Requirements contained in this MWO shall be included in the installer's inspection plan or quality program. Specific installer responsibilities for this MWO are as follows:
  - (1) The installer is responsible for following the instructions contained in this MWO for the installation of the Air Pressure Relief Valve Kit.
  - (2) The installer is responsible for notifying the Government if the Air Pressure Relief Valve Kit was received in an incomplete state, or in open or damaged packaging material.
  - (3) The installer is responsible for quality workmanship.
- c. **In-Process Inspection.** During normal operations, paragraph 10, Modifications Procedures, will be used to check the installer's work. Once installed, and with the vehicle air system operational, check all installed components for air leaks. If leaks exist, disassemble and reinstall components per the instructions in paragraph 10. All defects will be corrected by the installer before the vehicle is placed in service. All vehicles modified during a production shift will be checked to ensure product quality.
- d. **Workmanship Inspection.** Inspect all components removed, installed or replaced during the modification for security of mounting.

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

- a. **Records and Reports.** The organization responsible for MWO 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 online at <http://www.mmis-mwo.com>. Passwords are normally approved and issued within 48 hours.
- (2) Submission will be comprised of the nine (9) data elements listed in the table below. Elements 1, 2, 4, 6, 7, 8, and 9 are given for this MWO (as shown). The person reporting the MWO data will acquire the remaining elements (3 and 5) and input all nine into MMIS.

**DATA Elements**

1. Material Change Number (MCN):
2. MWO Number:
3. Unit Identification Code (UIC) @ Battalion Level
4. NSN of End Item
5. Serial Number
6. USA Registration Number
7. Date of Application
8. Hours required for Application
9. Software Version (not applicable)

- (3) For off-line reporting, the 3.5-inch disk shall be mailed to the following address:

Commander  
TACOM-Warren  
ATTN: AMSTA-LC-CIPWM (Nelson)  
Warren, MI 48397-5000

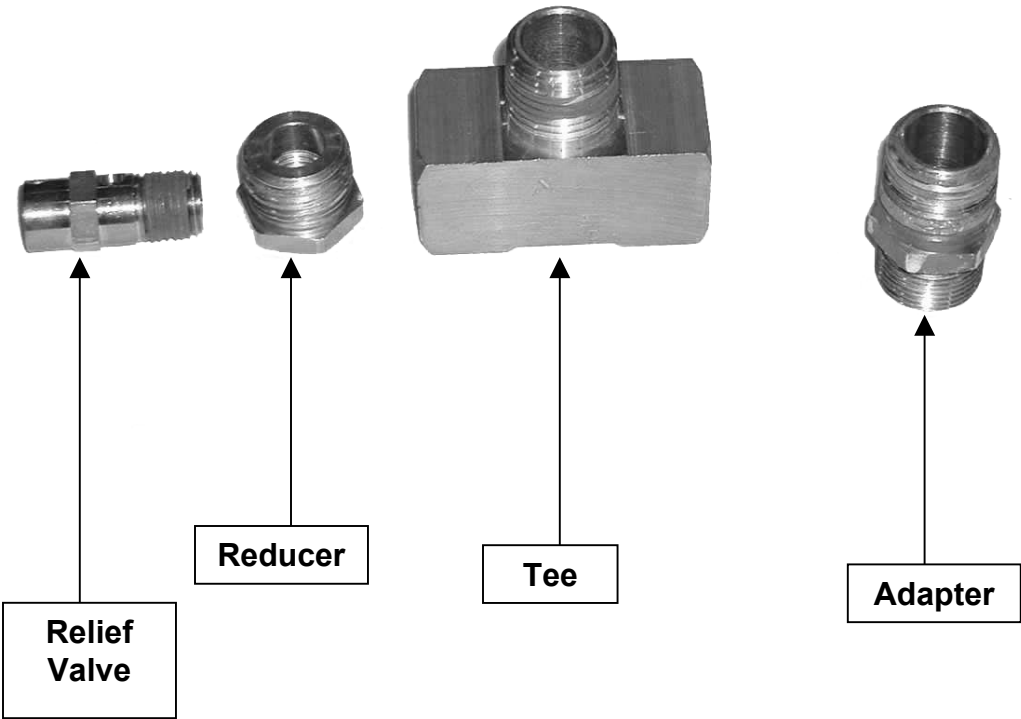
- b. **Marking Equipment.** After Air Pressure Relief Valve Kit is installed, stamp "MWO 9-2320-386-20-1" and the date installed on the Cab Body Reinforcement Panel using metal stamping die set (5110-00-293-1905) (see figure3).

**15. MATERIAL CHANGE (MC) NUMBER**

This MWO is authorized by MC number 1-00-06-0002

**16. MODIFICATION IDENTIFICATION**

- a. When stamped correctly, the MWO number and date will appear on the Cab Body Reinforcement Panel as shown in figure (3).
- b. After the Air Pressure Relief Valve Kit is installed, the vehicle air system should be tested for proper operation. Any faults detected or discrepancies noted will be corrected before the vehicle is returned to normal service.



Components of Air Pressure Relief Valve Kit

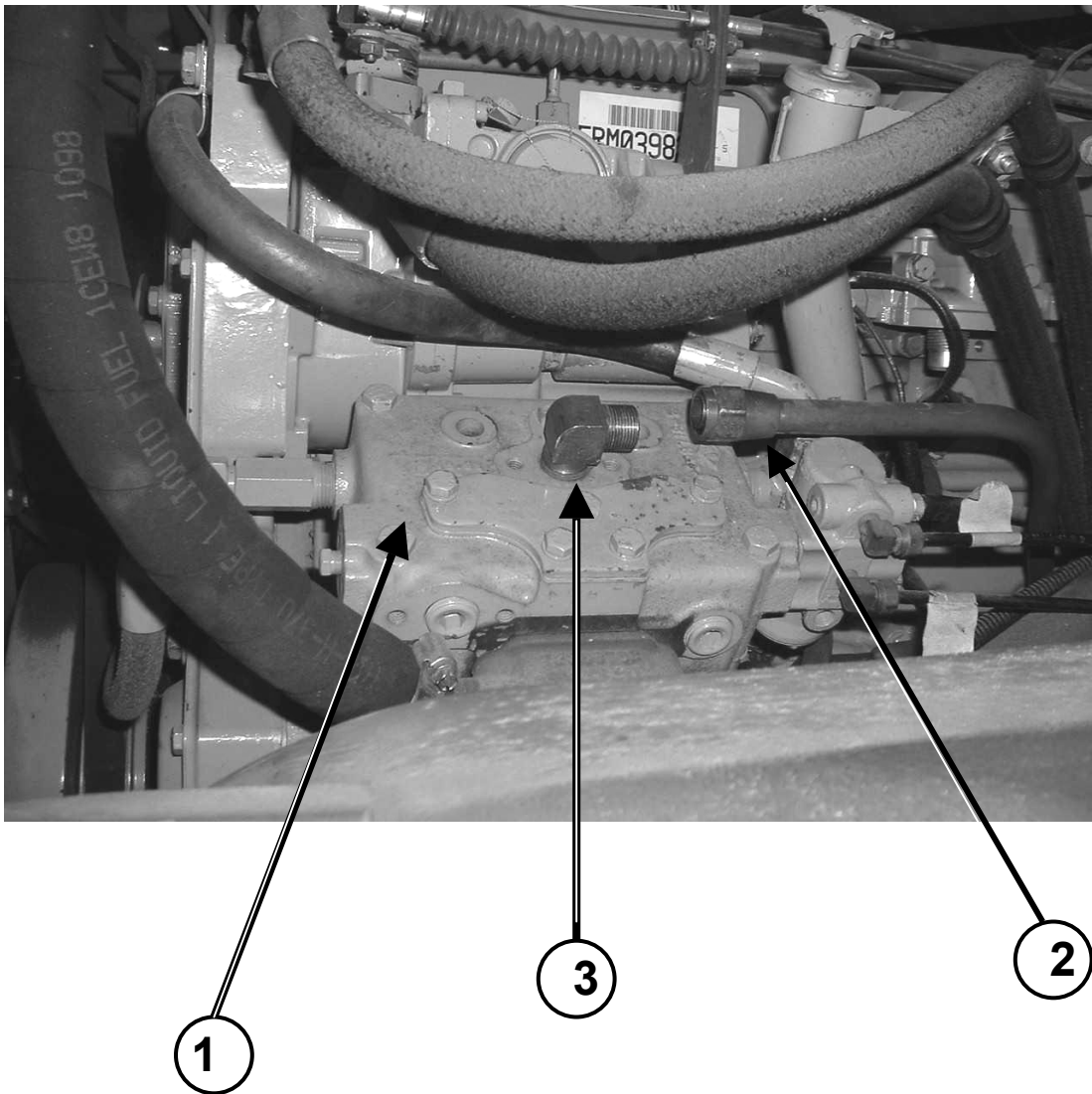


Figure 1



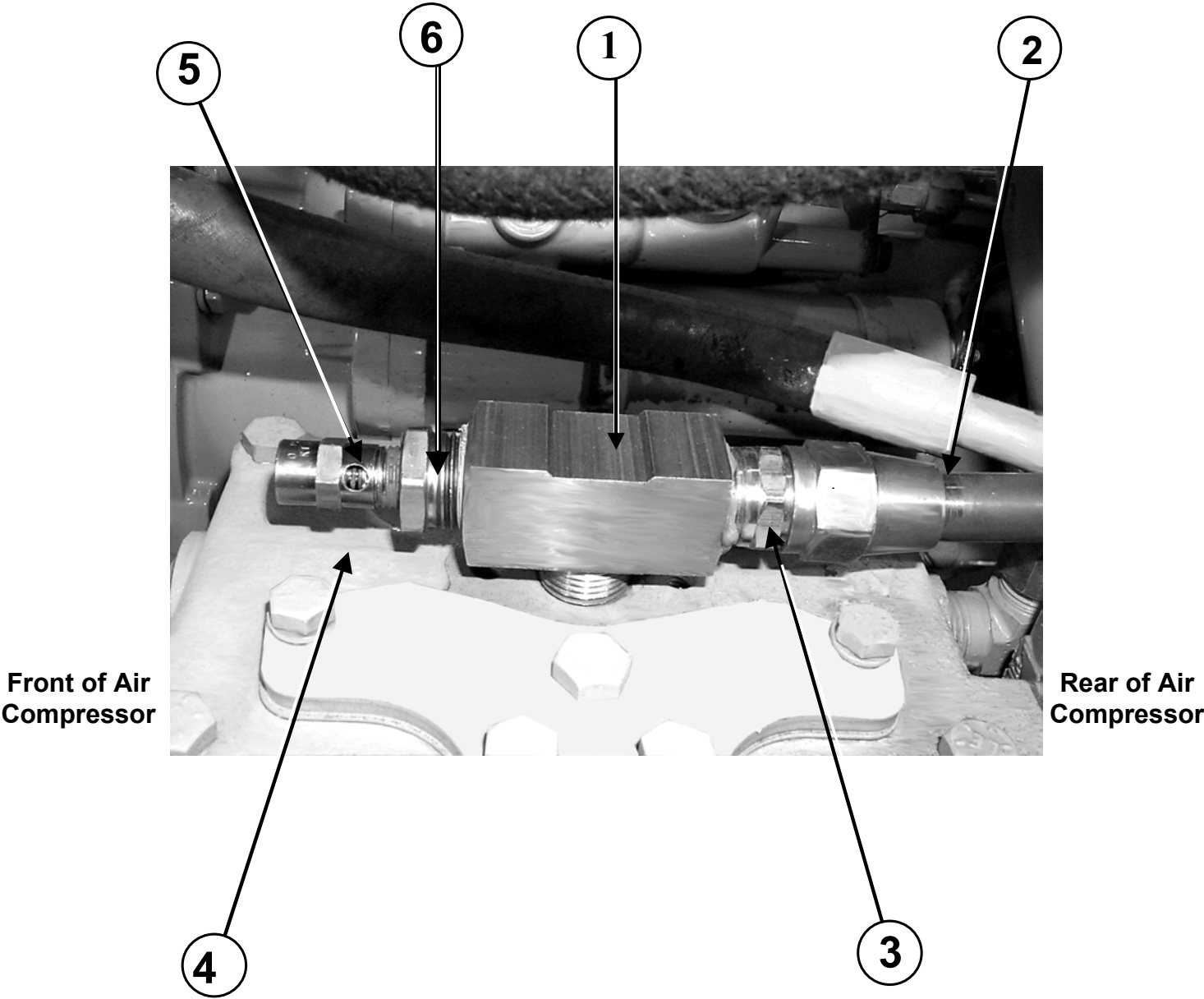


Figure 2

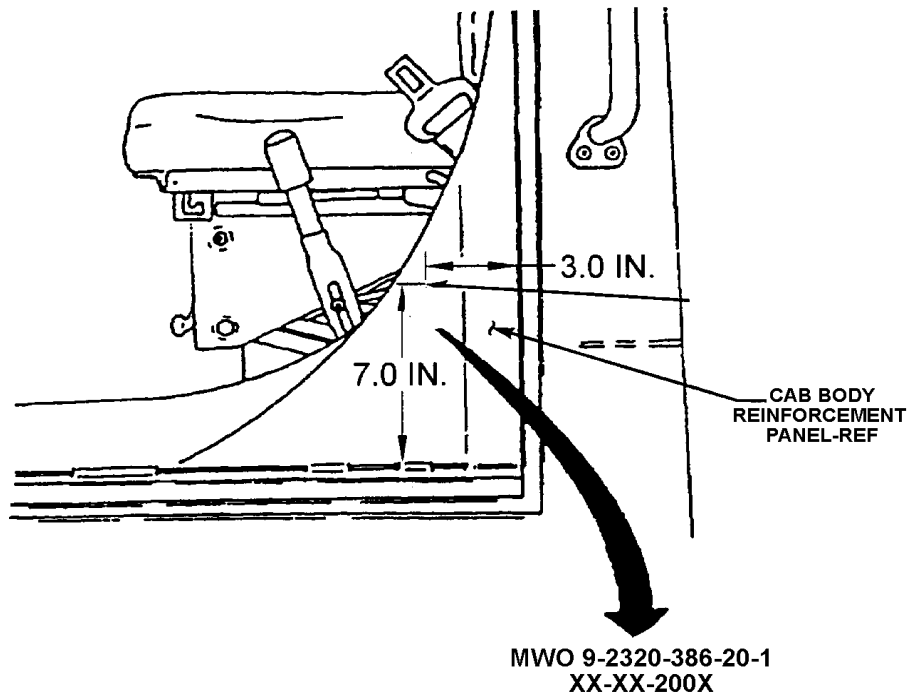



Figure 3

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER  
General, United States Army  
Chief of Staff

Official:

A handwritten signature in black ink that reads "Joel B. Hudson". The signature is written in a cursive style with a large, sweeping initial "J".

JOEL B. HUDSON  
Administrative Assistant to the  
Secretary of the Army  
0412009

DISTRIBUTION:  
To be stocked and issued by proponent.

