Headquarters Department of the Army Washington, DC,

Hydraulics

1. Change FM 5-499, 01 August 1997, as follows:

Remove Old Pages

Insert New Pages

7-11 and 7-12 7-11 and 7-12

- 2. A bar (I) marks new or changed material.
- 3. File this transmittal sheet in front of the publication.

DISTRIBUTION RESTRICTION: Approved for public release; distribution is unlimited.

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

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with the initial distribution number 115487, requirements for FM 5-499.

Change 1



Figure 7-5. Battery installed between earth ground and chassis ground

flows. About 30 volts can produce 0.1 amp, so use extreme caution when working with circuits that include voltages higher than 30 volts.

• Most electrical shocks are unexpected. Even ones that are not particularly dangerous could cause you to jerk your hand into heavier currents or hit some sharp object. Always check to see that the power is turned off before placing your hand in a circuit.

b. Practices. When working with electrical equipment, consider the following safety rules:

• Never put both hands in a live circuit as this provides a path for a current flow through the heart. Keep one hand behind you or in your pocket when taking measurements with a meter.

- Never work on live circuits when wet, as this lowers the body's resistance and increases the chance for a fatal shock.
- Never work alone on electrical equipment. Shocks above 0.01 amp can paralyze your muscles and leave you unable to remove yourself from the source of the current flow. Always be sure someone else is around to help in an emergency.
- Use the proper equipment for circuit testing. Check for correct junction settings, range switches, proper insulation on test probes, and so forth.
- Remove all watches, rings, chains, and any other metal jewelry that may come in contact with an electrical potential or get caught in moving mechanical parts. Do this before you work on any electrical equipment, circuit, or battery.
- Have a good understanding about the circuit you are working on. Think about what you need to do before working on the circuit. Ask for help if you do not know enough about the task you are to perform.