

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

AIR TRANSPORTABILITY GUIDANCE

M151 1/4-TON TRUCK AND M100 1/4-TON TRAILER IN CH-17 HELICOPTER

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1. Purpose and Scope

a. This manual provides transportability guidance for movement of the M151 1/4-ton truck and the M100 1/4-ton trailer (also referred to as "item") in the CH-47 helicopter. The text prescribes procedures, materials, and manpower to prepare, load, tie down, and unload the item.

b. Users of this manual are encouraged to submit recommended changes or comments to improve the document. Comments should be keyed to the specific page, paragraph, and line of the text in which a change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to Commanding Officer, U.S. Army Transportation Engineering Agency, ATTN: TCTEA-TG, Fort Eustis, Va., 23604.

2. Applicability

a. These instructions apply when the item is located and tied down as shown in the loading diagram and tiedown data table. A transported unit can, with the consent of the helicopter commander, add additional cargo within allowable load limits and restrictions prescribed by pertinent safety regulations (app.).

b. For operational reasons, or to accommodate additional cargo, the helicopter commander may designate a location other than that shown in the

loading diagram. If the item is relocated, the helicopter commander must insure that-

- (1) The number and load capacity of the tie-down devices are as prescribed in this manual.
- (2) The tiedown devices restraining the item are secured to tiedown fittings of at least the same strength and in the same location relative to the item as those fittings used in the loading diagram.

Warning: Transport of the M151 1/4-ton truck and M100 1/4-ton trailer in the CH-47 helicopter is prohibited if the item is not loaded and tied down in accordance with the instructions in this manual.

3. Responsibilities

Commanders of the transported and transporting units are responsible for the following:

a. Transported Unit.

- (1) Preparing unit equipment for air transport, with supervision and assistance as required from appropriate field support units.
- (2) Loading, tying down, and unloading unit equipment transported aboard the helicopter, subject to approval by the helicopter commander or his authorized representative. Such approval is to insure

that loading, tie down, and unloading are accomplished as prescribed by this manual.

- (3) Effecting advance coordination with the transporting unit. This coordination will include a request for the tiedown devices required.
- (4) Providing manpower and the necessary shoring, padding, vehicles, and other materials required to accomplish item preparation, loading, and unloading.
- (5) Providing guidance to the helicopter commander relative to safety and to any technical peculiarities of the item which may affect its safe and reliable air transport.

b. Transporting Unit.

- (1) Supplying a sufficient quantity of the type of tiedown devices requested.
- (2) Operating helicopter-associated equipment and monitoring loading, tiedown, and unloading procedures to insure conformance with this manual.
- (3) Inspecting the helicopter for serviceability appropriate to the mission and complying with pertinent aviation directives.

4. Load Description

The approximate dimensions and weight of the item are as follows:

	Length (in.)	Width (in.)	Height (in.)	Weight (lb.)
M151 Truck _____	132	63	53	2,350
M100 Trailer -----	108	57	43	*1,090

•Weight includes 500 pounds of cargo secured in trailer.

5. Preparation and Loading

a. *Material.* Four small clevis assemblies (FSN 1670-360-0304).

b. *Procedures.*

- (1) Remove truck top and store in vehicle; strap down the top supports.
- (2) Lower and lock windshield.

- (3) Insure that fuel tank contents of truck do not exceed 3/4-tank capacity.
- (4) Attach small clevis assembly to each wheel hub of M151 1/4-ton truck.
- (5) Position guides in helicopter and at left front of item to observe clearances and to signal truck driver as necessary.
- (6) Back item into helicopter to tiedown position; truck and trailer remain coupled.
- (7) Place truck transmission in gear: set brakes on truck and trailer.
- (8) Tie down the item in accordance with figures 1, 2, 3, and 4 and the tiedown data table. Six MB-1 and six CGU-1/B tiedown devices are required.
- (9) Three men can prepare, load, and tie down the item in approximately 25 minutes.

Note. It is emphasized that the times given for the operations described in this manual are for guidance purposes only and may vary, dependent upon existing conditions.



Figure 1. Typical tiedown of M100 1/4-ton trailer.
(View through main cabin entrance door.)