DEPARTMENT OF THE ARMY TECHNICAL MANUAL

Transportability Guidance

WATER PURIFICATION EQUIPMENT SET, DIATOMITE FILTER, 1500-GPH, TRUCK MOUNTED

Headquarters, Department of the Army, Washington, D.C.
24 August 1965

	Paragraph
Purpose	1
Scope	2
Description	3
Modes of transport	4
Sectionalization	5
Procedures for air transport	6
Cautionary overseas loading procedures to alleviate chassis bending of the truck-mounted water purification equipment	7
Item characteristics and related data	8

1. Purpose

This manual provides transportability guidance in the shipment or movement of the Water Purification Equipment Set, Diatomite Filter, 1500-GPH, Truck Mounted (fig. 1).

2. Scope

a. The information contained in this manual covers significant transportability and safety considerations in the movement of the item by the various modes of transport. Included are side- and end-elevation drawings (figs. 2 and 3), and characteristics of the item.

b. Report all deficiencies in this manual on DA Form 1598 (Record of Comments on Publications). Submit recommendations for changes, additions, or deletions to the Commanding Officer, U.S. Army Transportation Engineering Agency, ATTN: TCTEA–TG, Fort Eustis, Va. 23604.

3. Description

The water purification equipment set consists of a truck-mounted van; two 1500-gallon collapsible fabric tanks; and a 10-kw generator, mounted on the Trailer, Cargo, $1^1/_2$-Ton, M105A2. For transport, the two tanks, collapsed, are stowed in the van or on the cargo trailer. The van is mounted on a Chassis, Truck, $2^1/_2$ Ton, 6 x 6, M45. The M105A2 trailer with 10-kw generator mounted thereon poses no transportability problem and is not included in this manual under surface modes of transport. It is included in the air transport section for movement by the C–130 U.S. Air Force aircraft.

4. Modes of Transport

(Figures in parentheses throughout this manual are metric equivalents.)

a. *Shipment by Air.*

(1) The item is not transportable by U.S. Army aircraft.

(2) Based on a typical logistical mission of 2,500 nautical miles (4625 km), one way, the item, without sectionalization, is within the dimensional and weight capabilities of the C–124C- and the C-133-series U.S. Air Force aircraft. After sectionalization, as described in paragraph 5, the van body and the truck chassis together are

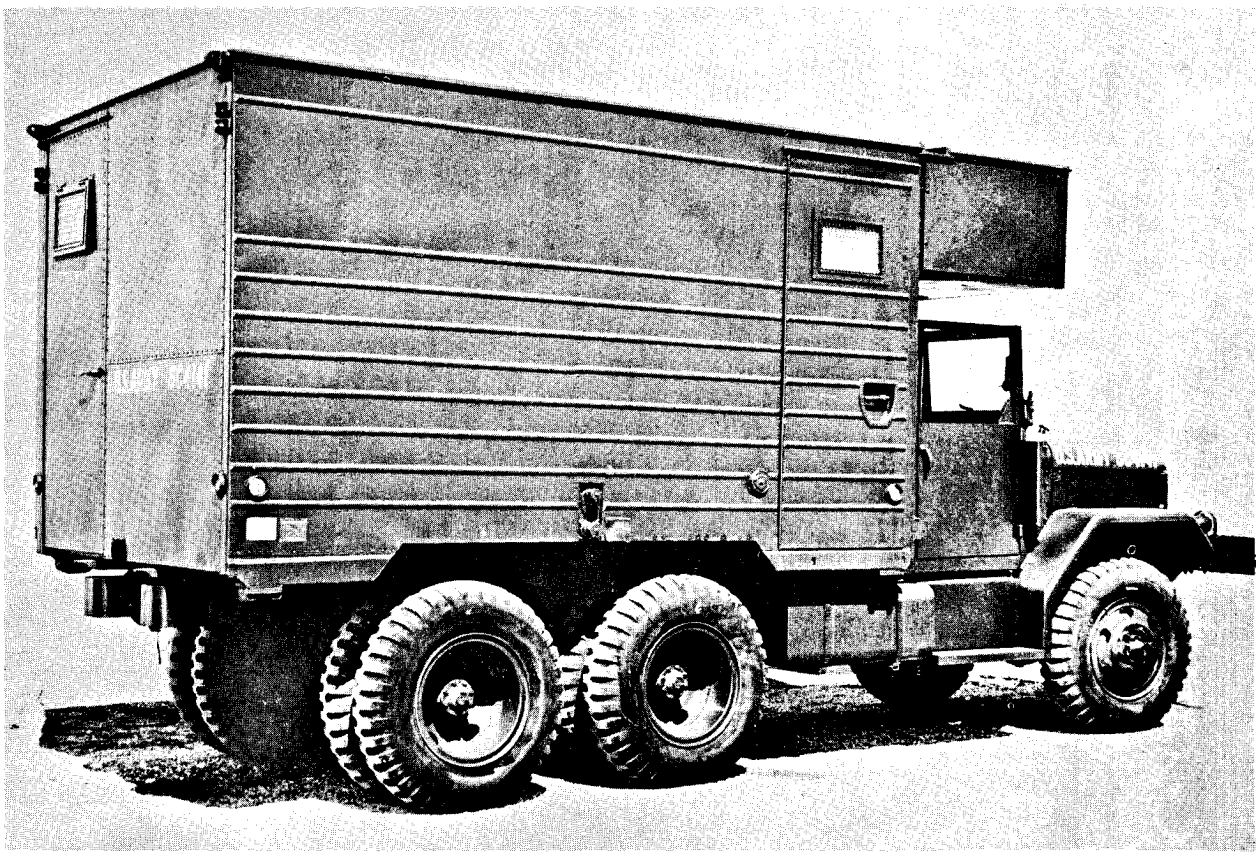


Figure 1. Water Purification Equipment Set, Diatomite Filter, 1500-GPH, Truck-Mounted.

within the dimensional and weight capabilities of the C-124C, C-130B, C-130E, and C-141 U.S. Air Force aircraft.

(3) Based on a typical logistical mission of 1,000 nautical miles (1852 km), one way, and after sectionalization as described in paragraph 5, the van body and the truck chassis together are also within the dimensional and weight capabilities of the C-124A and the C-130A U.S. Air Force aircraft. Shipped separately, either the van body or the truck chassis is within the dimensional and weight capabilities of the C-119G and the C-123B U.S. Air Force aircraft.

Note. The maximum U.S. Air Force aircraft cargo weight and range capabilities are based on the following conditions:

Standard day conditions
Sea level operating conditions
Hard-surfaced runways
No weather alternate required
No wind conditions
Fuel reserve
Constant cruising altitude

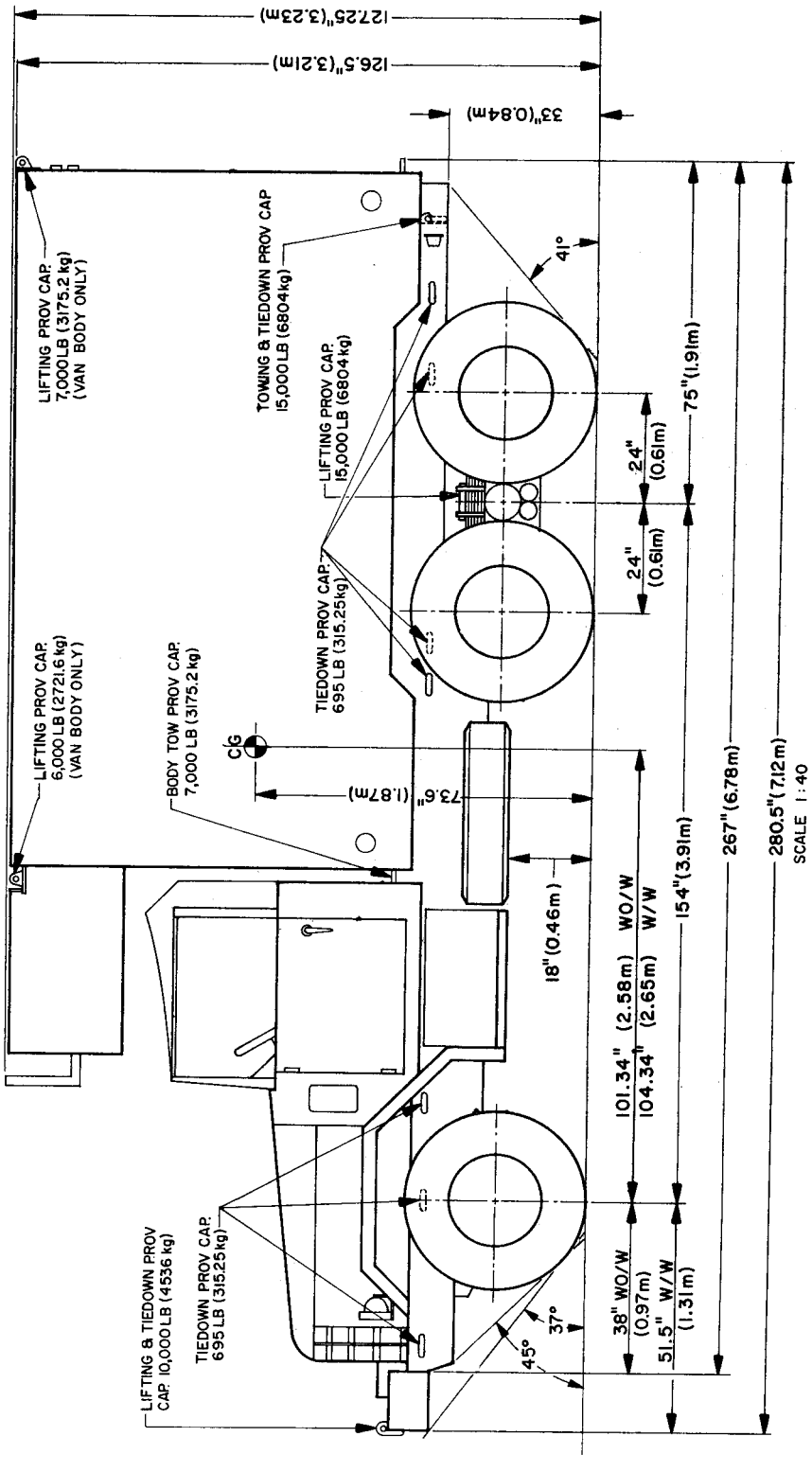
In the event one or more of these operating conditions are changed, the maximum cargo load and/or range may be affected.

(4) See paragraph 6 for loading and restraining procedures of the item and the supporting power unit (10-kw generator mounted on the M105A2 trailer) in the C-130 U.S. Air Force aircraft.

b. Shipment by Highway.

(1) *On road.* The item is transportable by highway under its own power. The width of the item exceeds legal highway limitations in CONUS and the recommended highway limitations in oversea areas. Special permits will be required in CONUS, and special routing may be required in oversea areas. See figure 4 for turning characteristics.

(2) *Off road* (Soils Trafficability Data).


127.25"(3.23m)
126.5"(3.21m)
33"(0.84m)
LIFTING PROV CAP.
7,000LB (3175.2 kg)
(VAN BODY ONLY)
TOWING & TIEDOWN PROV CAP
15,000 LB (6804kg)
LIFTING PROV CAP.
15,000 LB (6804 kg)
41°
24"
(0.61m)
75"(1.91m)
TIEDOWN PROV CAP.
695 LB (315.25kg)
LIFTING PROV CAP.
6,000 LB (2721.6 kg)
(VAN BODY ONLY)
BODY TOW PROV CAP.
7,000 LB (3175.2 kg)
C/G
73.6"(1.87m)
18"(0.46m)
101.34" (2.58m) WO/W
104.34" (2.65m) W/W
154"(3.91m)
267"(6.78m)
280.5"(7.12m)
SCALE 1:40
LIFTING & TIEDOWN PROV
CAP. 10,000 LB (4536 kg)
TIEDOWN PROV CAP.
695 LB (315.25kg)
38" WO/W
(0.97m)
51.5" W/W
(1.31m)
37°
45°