

## CHAPTER 4 RIGGING TDARS IN THE M1025 OR M1026 ARMAMENT CARRIERS FOR LOW-VELOCITY AIRDROP

### 4-1. Description of Load

The TDARS is rigged as an accompanying load in the 1 1/4-ton utility truck (HMMWV), M1025 or M1026 Armament Carriers. The TDARS consists of a quadropod antenna, an antenna mast, a transceiver, a generator, two 5-gallon fuel cans, two 5-gallon water cans, a camouflage net, and poles. The TDARS weighs 735 pounds. One box of 105-mm ammunition, or its equivalent in weight, is added in order to meet the minimum weight requirements. The total weight of this accompanying load is 845 pounds. This load is rigged as shown in FM 10-517/TO 13C7-1-111, Chapter 3, Section I, except for the building and placing of the turret

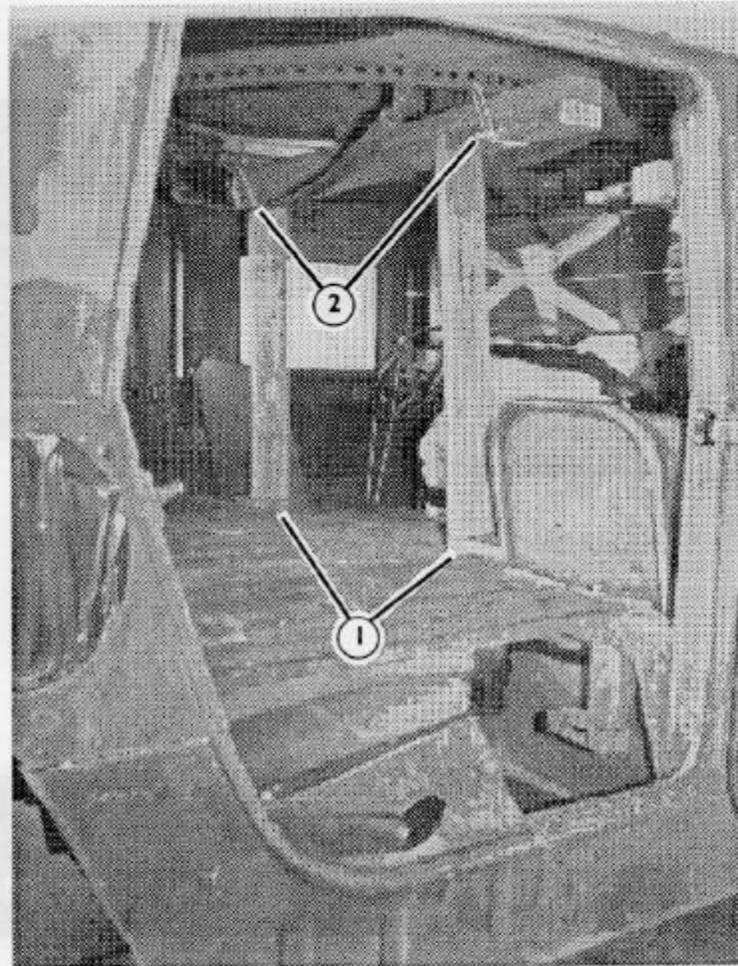
support and the accompanying load which is rigged as shown here.

### 4-2. Building and Placing Turret Support

Build and place the turret support as shown in Figure 4-1.

### 4-3. Stowing Accompanying Load

Stow the TDARS in the truck as shown in Figures 4-2 through 4-10. The TDARS load must meet the weight requirements for an accompanying load as shown in paragraph 3-5 of FM 10-517/TO 13C7-1-111.

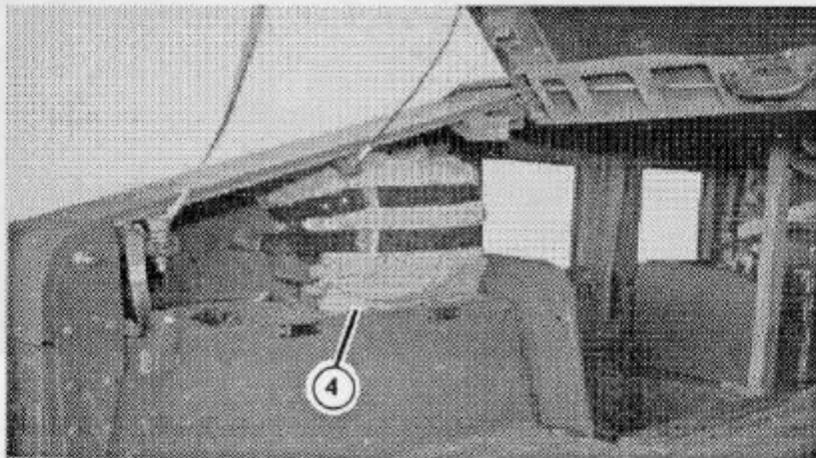
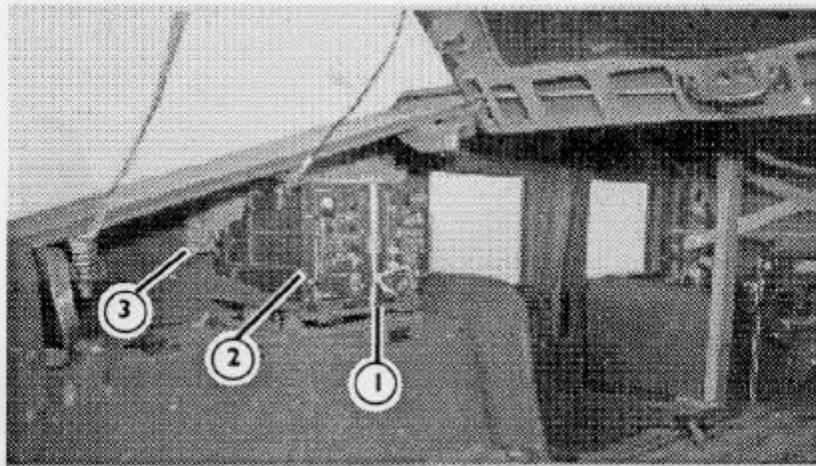


- ① Build the turret support as shown in Figure 3-2 of FM 10-517/TO 13C7-1-111, except replace the two pieces of 1- by 6- by 12-inch lumber with two pieces of 2- by 4- by 4-inch lumber.

**NOTE:** The 2- by 4- by 4-inch lumber should be nailed in place after positioning the support under the turret.

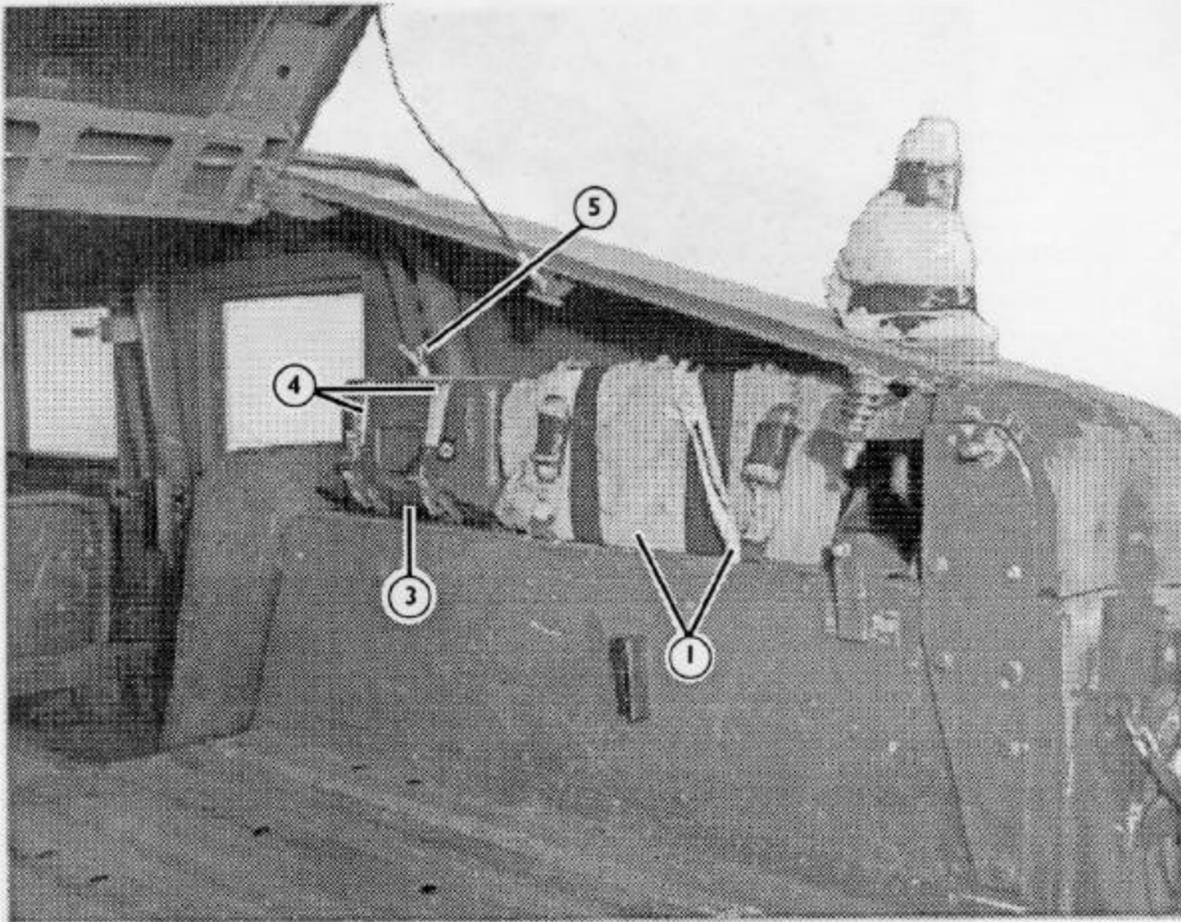
- ② Center the support under the turret with the front towards the passenger's compartment. Tie the support in place with two lengths of type III nylon cord.

Figure 4-1. Turret support built and placed



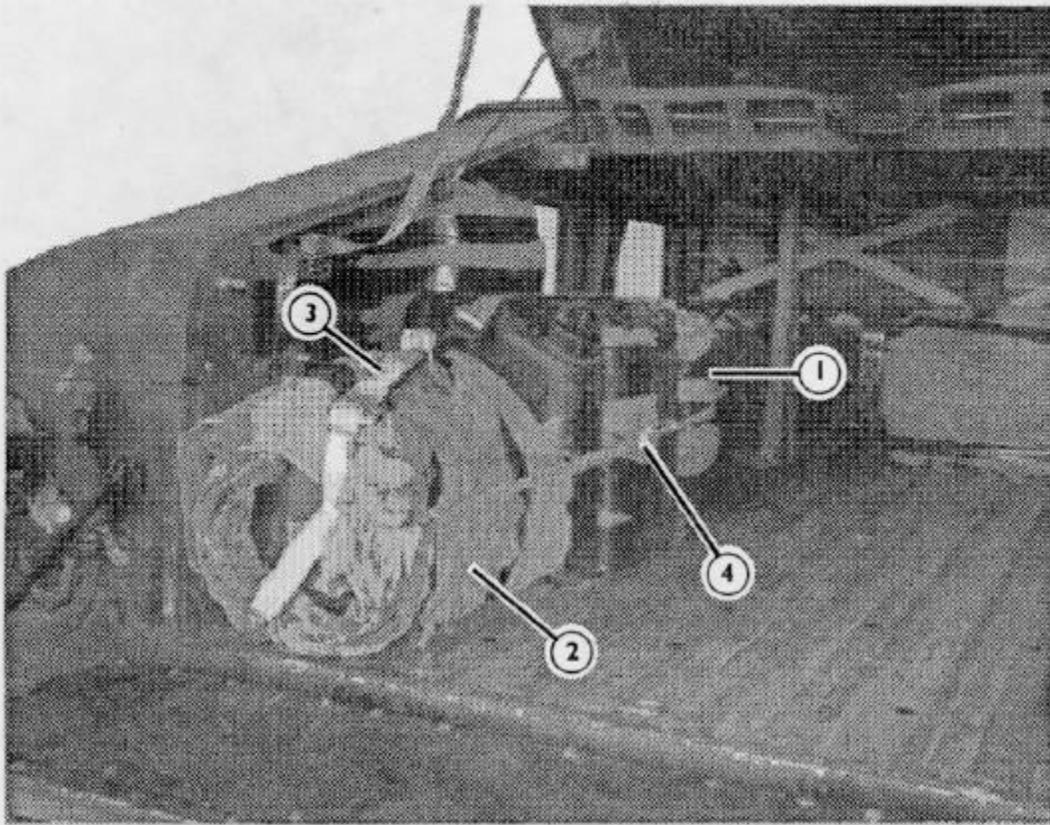
- ① Place a length of 1/2-inch tubular nylon webbing under the radio mount on the left rear wheel well.
- ② Place the transceiver in the radio mount and lock in place with the locking nuts. Safety the transceiver in place with the 1/2-inch tubular nylon webbing placed in step 1.
- ③ Place cellulose wadding between the rear of the transceiver and the side of the truck.
- ④ Pad the front of the transceiver with cellulose wadding and tape.

Figure 4-2. Transceiver stowed



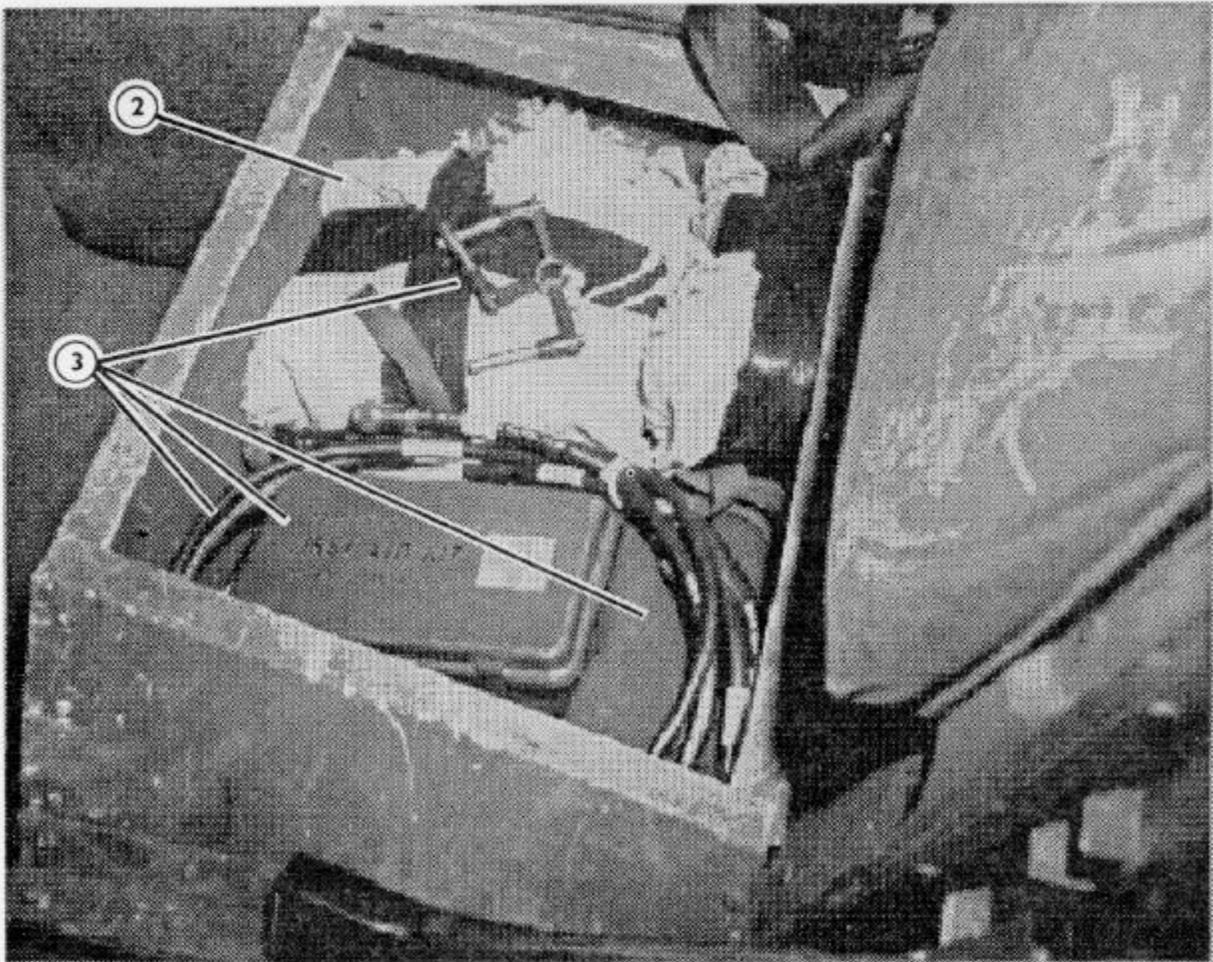
- ① Wrap the antenna pedestal with cellulose wadding and tape. Place the pedestal on the right rear wheel well. Secure the pedestal in place using the retainer straps, and safety it with a length of 1/2-inch tubular nylon webbing tied to the retainer strap support.
- ② Run a length of 1/2-inch tubular nylon webbing from front to rear under the display unit's support bracket (not shown).
- ③ Place two 12- by 12-inch pieces of felt on the support bracket.
- ④ Place the display unit on top of the felt and secure it in place with the retainer straps.
- ⑤ Safety the display unit in place with the 1/2-inch tubular nylon webbing positioned in step 2.

Figure 4-3. Antenna pedestal and display unit stowed



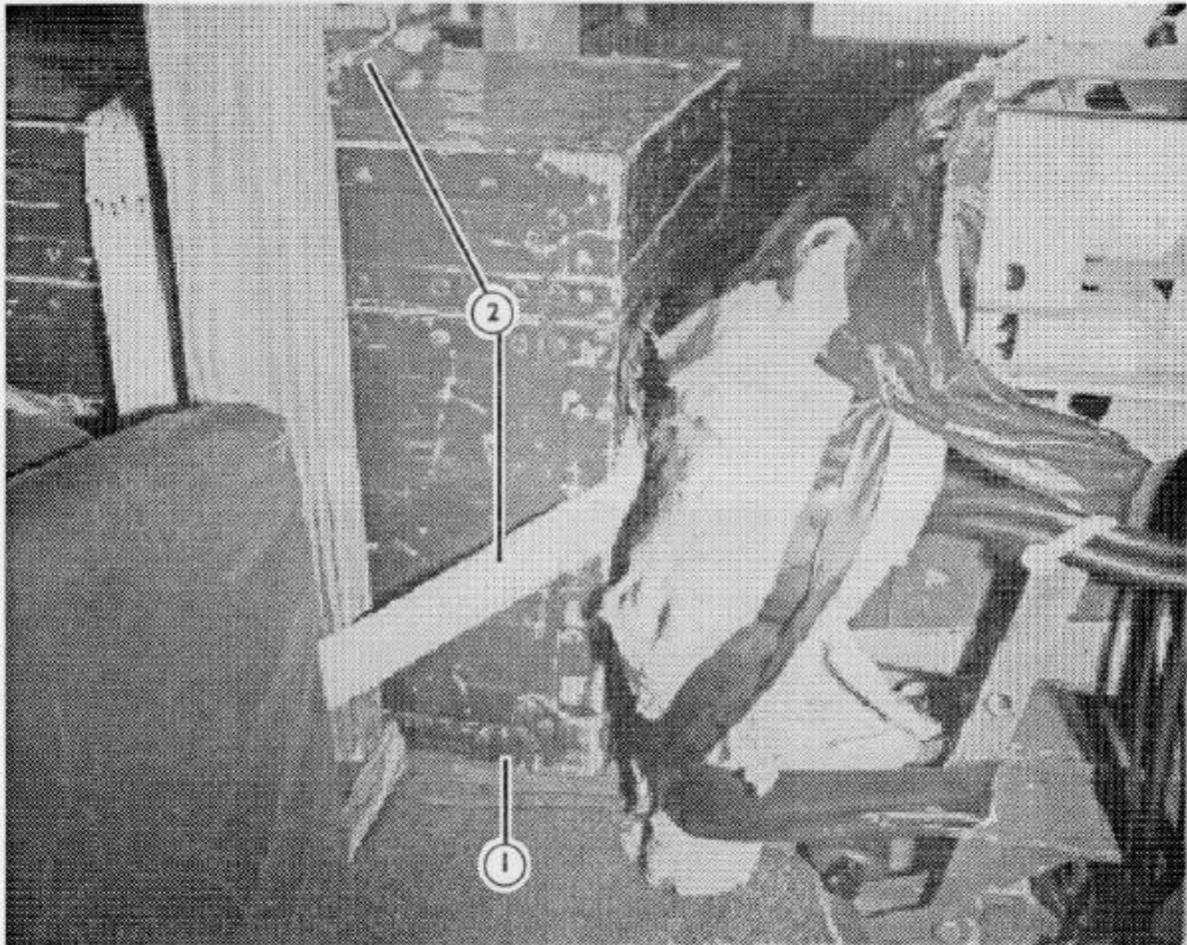
- ① **Wrap the sides and bottom of the two fuel cans with cellulose wadding and tape. Place the two fuel cans and the two water cans on the cargo bed next to the left wheel well. Make sure a water can is placed between the two fuel cans.**
- ② **Wrap the generator with cellulose wadding and tape. Place the generator next to the fuel and water cans.**
- ③ **Secure the cans in place using a 15-foot tie-down assembly. Pass the strap through the rear tie-down ring, through the handles of the cans, and through the center tie-down ring. Fasten the strap with a load binder and D-ring.**
- ④ **Safety the 15-foot tie-down strap in place using a length of 1/2-inch tubular nylon webbing. Tie the 1/2-inch tubular nylon webbing to the strap near the rear tie-down ring, pass it around the front of the cans, and tie it off to the strap near the center tie-down ring.**

Figure 4-4. Generator, fuel cans, and water cans stowed



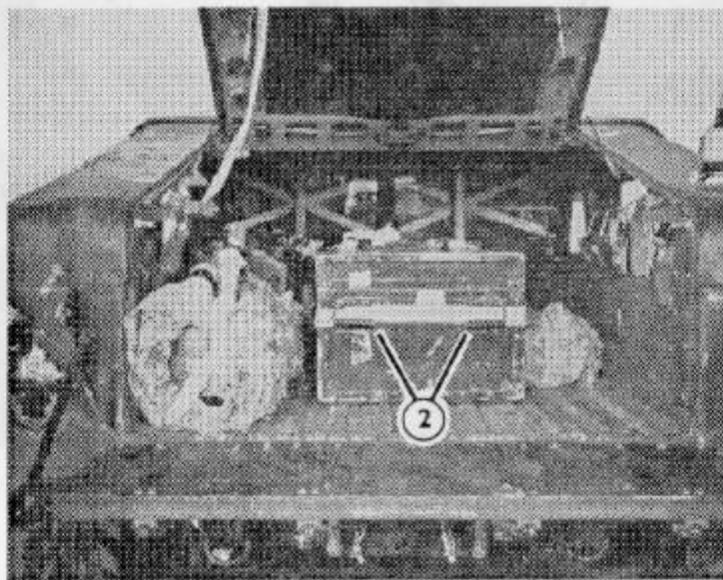
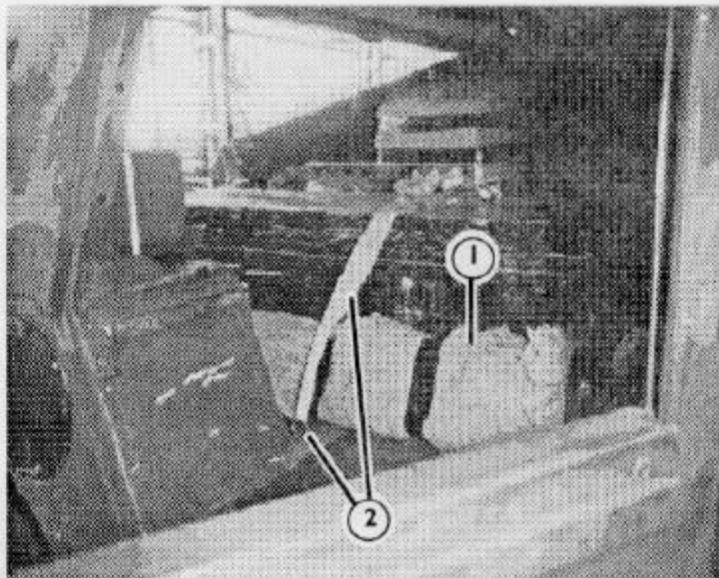
- ① Place the right rear seat back in the down position (not shown).
- ② Wrap the antenna mast baseplate, power converter, and remote control with cellulose wadding and tape. Place these items in the compartment under the left rear seat cushion.  
**NOTE:** The antenna mast baseplate cannot be seen in this photograph.
- ③ Place the power cables, OVM tools, first aid kit, and locking pins in the compartment.
- ④ Fill the empty space of the compartment with cellulose wadding and replace the seat cushion (not shown).

Figure 4-5. Rear seat and various small items stowed



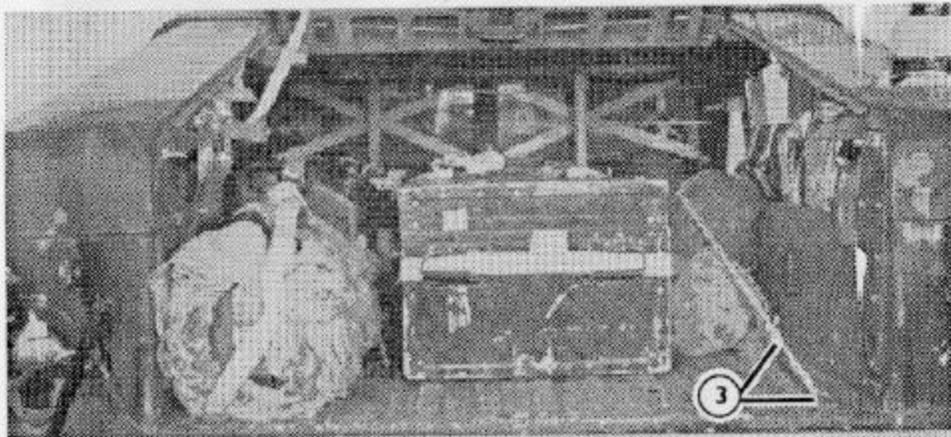
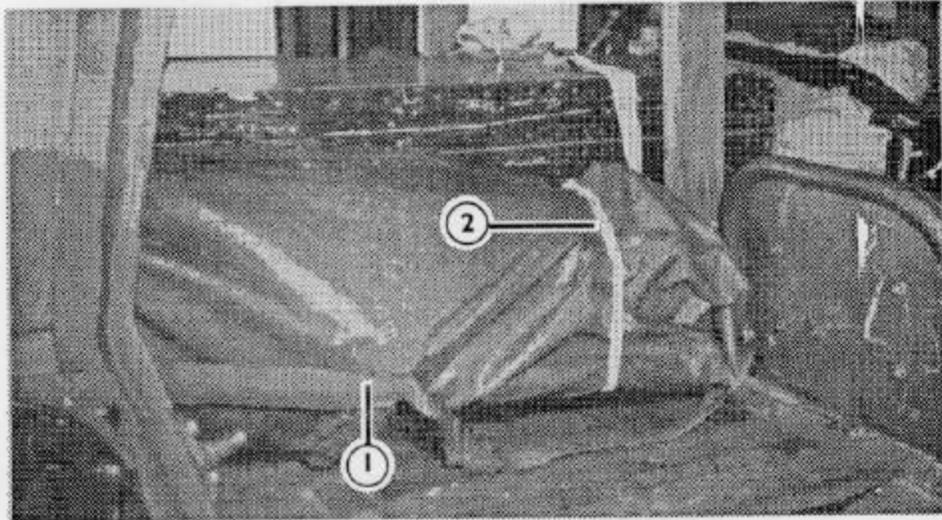
- ① Place the antenna container in the middle of the cargo bed with the forward end between the legs of the turret support.
- ② Pass a 15-foot tie-down lashing through the forward cargo tie-down rings and through the forward handles of the container. Fasten the lashing on top of the container using a D-ring and load binder.

Figure 4-6. Antenna container stowed



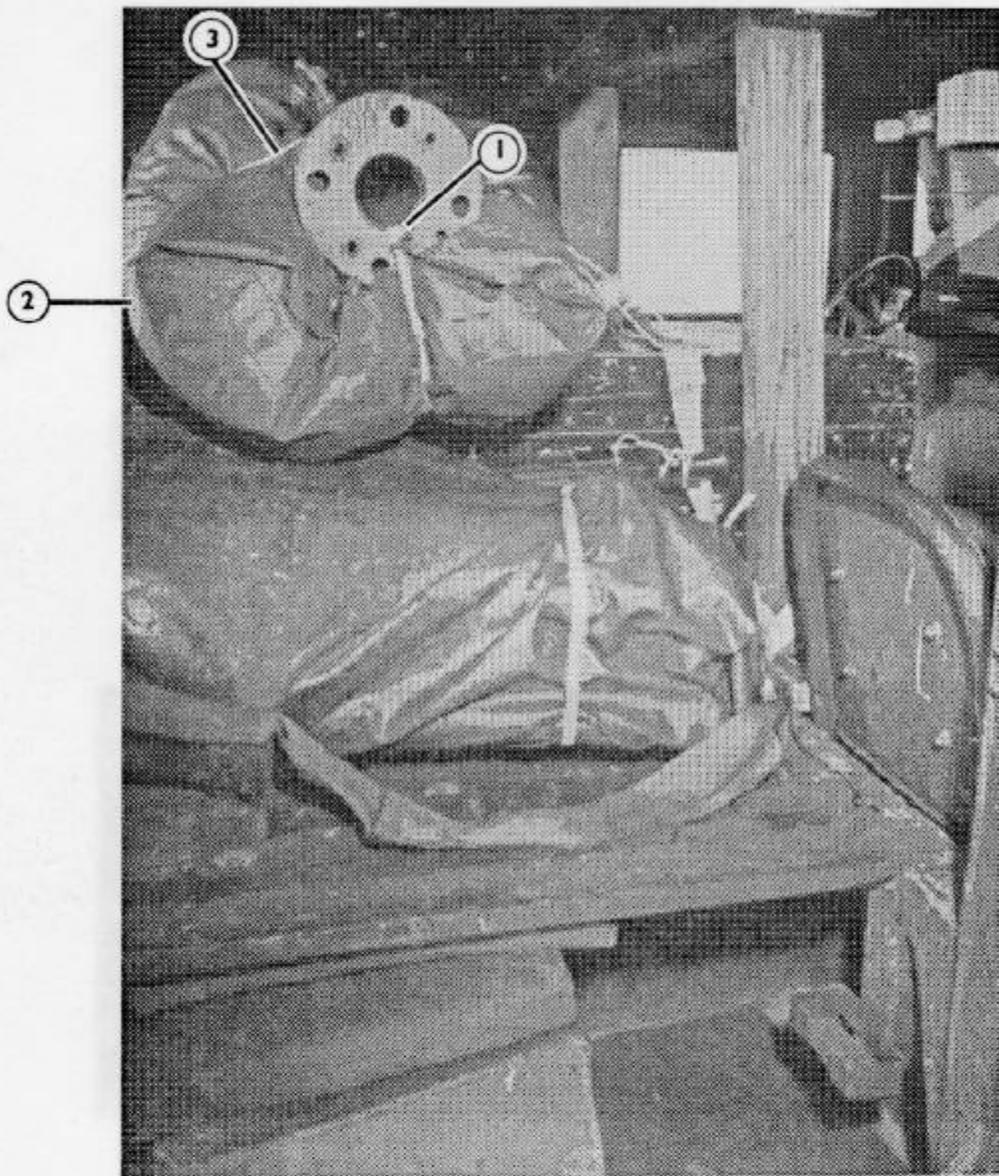
- ① **Wrap the quadropod with cellulose wadding and tape. Place the quadropod along the right side of the antenna container.**
- ② **Pass a 15-foot tie-down lashing through the center cargo tie-down rings and through the rear handles of the container. Fasten the tie-down lashing on top of the container using a D-ring and load binder.**

Figure 4-7. Quadropod stowed



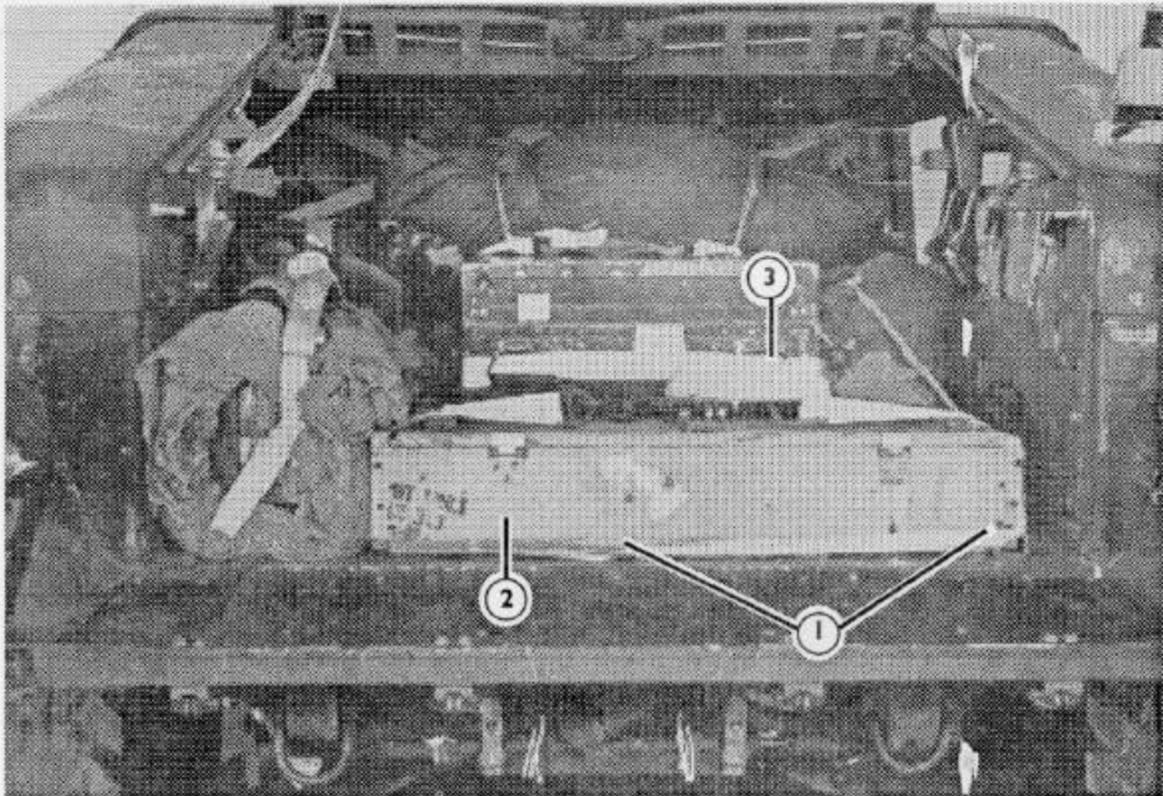
- ① Place the bag of camouflage poles on top of the quadropod.
- ② Using a length of 1/2-inch tubular nylon webbing, tie the forward end of the bag of poles to the quadropod.
- ③ Using a length of 1/2-inch tubular nylon webbing, tie the rear end of the bag of poles to the right rear cargo tie-down ring.

Figure 4-8. Camouflage poles stowed



- ① Using 1/2-inch tubular nylon webbing, tie the antenna mast to the camouflage net.
- ② Place the camouflage net with antenna mast on top of the antenna container.
- ③ Using type III nylon cord, tie the camouflage net to the 15-foot tie-down lashings that are holding the antenna container in place.

Figure 4-9. Antenna mast and camouflage net stowed



- ① Pass a 15-foot tie-down lashing through the rear center and rear right side tie-down rings.
- ② Place a box of 105-mm ammunition, or a box of similar size and weight, at the rear of the cargo bed.
- ③ Pass the pre-positioned tie-down lashing under the box of ammunition and through the handles of the box. Fasten the tie-down lashing on top of the box using a D-ring and load binder.
- ④ Close and latch the tailgate (not shown).

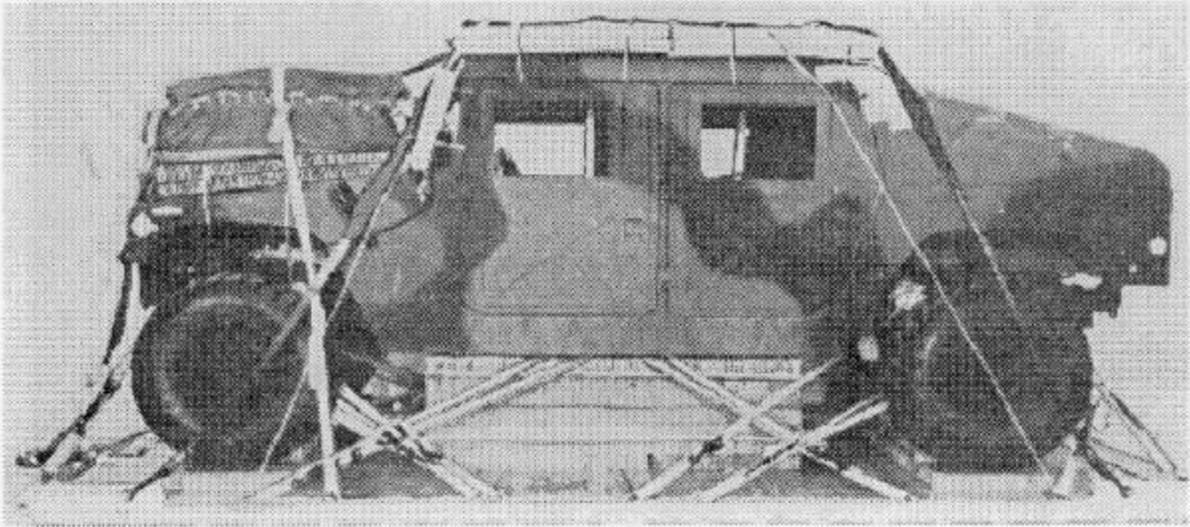
Figure 4-10. Ammunition box stowed

**4-4. Marking Rigged Load**

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 4-11. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the truck

fuel tank and the batteries have been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

**CAUTION**  
**Make the final rigger inspection required by FM 10-500-2/TO 13C7-1-5 before the load leaves the rigging site.**



CB

**RIGGED LOAD DATA**

<b>Weight:</b>	Load shown .....	9,650 pounds
	Maximum load allowed .....	10,500 pounds
<b>Height</b>	(with two G-11B parachutes) .....	91 inches
	(with three G-11A parachutes) .....	97 inches
<b>Width</b>	.....	108 inches
<b>Length</b>	.....	215 inches
<b>Overhang:</b>	Front .....	4 1/2 inches
	Rear .....	19 inches
<b>CB (from front edge of the platform)</b>	.....	93 inches

Figure 4-11. M1025 or M1026 armanent carrier with TDARS rigged for low-velocity airdrop

**4-5. Equipment Required**

Use the equipment listed in Table 3-1 of FM 10-517/ TO 13C7-1-111, except for the additions or deletion shown in Table 4-1.

**Table 4-1. Equipment required for rigging the M1025 or M1026 armanent carriers with TDARS for low-velocity airdrop**

National Stock Number	Item	Quantity
5510-00-220-6080	Lumber: 1- by 6- by 12-in..... 2	2
5510-00-220-6146	Lumber: 2- by 4- by 4-in ..... 2	2
1670-00-937-0271	Tie-down assembly, 15-ft..... 4	4

## GLOSSARY

<b>AC</b> alternating current	<b>lb</b> pound
<b>ACB</b> attitude control bar	<b>mm</b> millimeter
<b>AFB</b> Air Force base	<b>no</b> number
<b>AFR</b> Air Force regulation	<b>NSN</b> national stock number
<b>AFTO</b> Air Force technical order	<b>OVM</b> operator vehicle maintenance
<b>attn</b> attention	<b>PEFTC</b> extraction force transfer coupling (platform)
<b>CB</b> center of balance	<b>Qty</b> quantity
<b>d</b> penny	<b>rqr</b> requirement
<b>DA</b> Department of the Army	<b>SL/CS</b> static line/connector strap
<b>DC</b> District of Columbia	<b>TDARS</b> technical defense alert radar system
<b>DD</b> Department of Defense	<b>TM</b> technical manual
<b>FM</b> field manual	<b>TO</b> technical order
<b>ft</b> foot/feet	<b>TRADOC</b> United States Army Training and Doctrine Command
<b>gal</b> gallon	<b>TSEC</b> telecommunications security
<b>HMMWV</b> high-mobility, multipurpose wheeled vehicle	<b>US</b> United States
<b>HQ</b> headquarters	<b>VA</b> Virginia
<b>in</b> inch	
<b>LAPE</b> low-altitude parachute extraction	

## REFERENCES

These documents must be available to the intended users of this publication.

AFR 71-4/TM 38-250. *Packaging and Materials Handling: Preparing Hazardous Materials for Military Air Shipments*. 15 January 1988.

FM 10-500-2/TO 13C7-1-5. *Airdrop of Supplies and Equipment: Rigging Airdrop Platforms*. 1 November 1990.

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FM 10-510/TO 13C7-2-451. *Airdrop of Supplies and Equipment: Rigging 1/4-Ton Trucks*. 15 May 1975.

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FM 10-518/TO 13C7-3-371. *Airdrop of Supplies and Equipment: Rigging 1/4-Ton Cargo Trailers*. 29 January 1982.

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