

**ARMY FM 10-556**  
**AIR FORCE TO 13C7-3-91**

**AIRDROP OF SUPPLIES  
AND EQUIPMENT**

**RIGGING POLE-TYPE  
UTILITY TRAILERS  
AND BOLSTER TRAILERS**

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**DEPARTMENTS OF THE ARMY AND THE AIR FORCE**

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NO 13C7-3-91

DEPARTMENTS OF THE ARMY  
AND THE AIR FORCE  
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# AIRDROP OF SUPPLIES AND EQUIPMENT

## RIGGING

### POLE-TYPE UTILITY TRAILERS AND BOLSTER TRAILERS

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\*This manual supersedes FM 10-556/TO 13C7-3-91, 28 February 1975.

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## PREFACE

### SCOPE

This manual tells and shows how to rig pole-type utility trailers and the bolster trailer for airdrop. Chapter 1 gives the descriptions and data for the unrigged items. Chapter 2 covers the rigging of the M11 or the M296, 2 1/2-ton pole-type utility trailer for a low-velocity or a low-altitude parachute-extraction (LAPE) system airdrop. Chapter 3 covers procedures for rigging the M796 bolster trailer for a low-velocity airdrop. This manual is designed for use by all parachute riggers.

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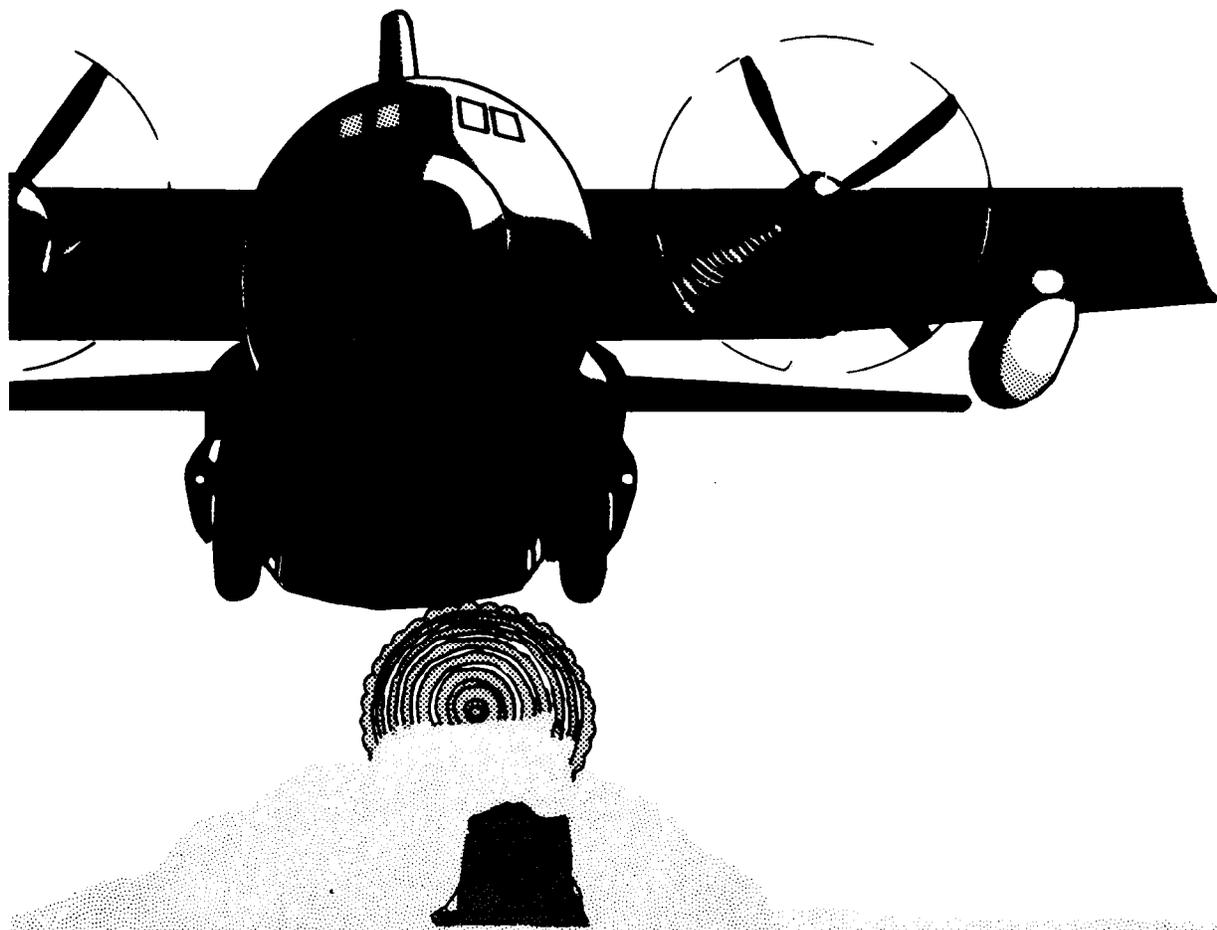
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# INTRODUCTION



## 1-1. Description of Items

The descriptions of the items covered in this manual are as follows:

*a.* The M11, 2 1/2-ton pole-type utility trailer weighs 2,580 pounds. It is 45 inches high, 95 inches wide, and 184 inches long.

*b.* The M296, 2 1/2-ton pole-type utility trailer weighs 2,680 pounds. It is 42 inches high and 96 inches wide. Its length is 230 inches, reducible to 176 inches.

*c.* The M796 bolster trailer weighs 4,915 pounds. Its height is 61 1/2 inches, reducible to 42 inches. The width of the trailer

is 92 inches. The trailer's length is 258 inches, reducible to 210 1/2 inches.

## 1-2. Special Considerations

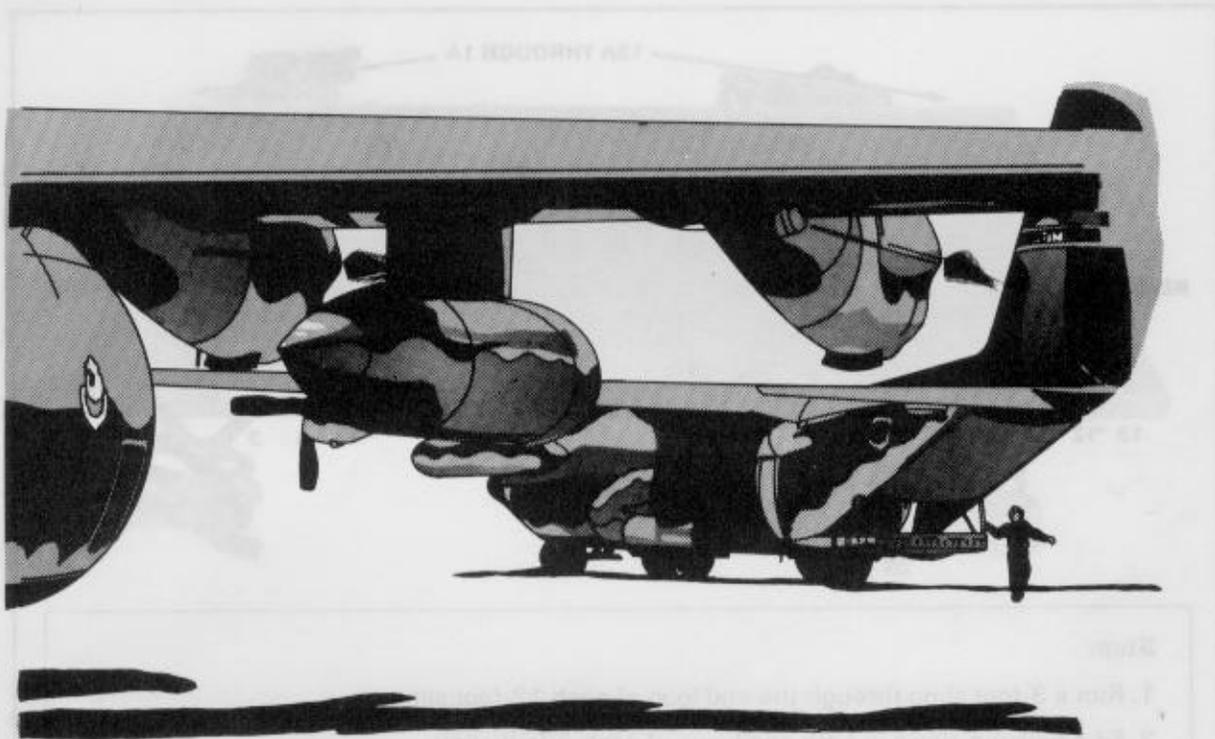
Special considerations are covered below.

**CAUTION:** Only ammunition authorized by FM 10-553/TO 13C7-18-41 may be airdropped.

***a.*** The accompanying load on the 2 1/2-ton, pole-type utility trailer may include hazardous materials. These materials must be packaged, marked, and labeled as described in AFR 71-4/TM 38-250.

***b.*** A copy of this manual must be available to the joint airdrop inspectors during the before-loading and after-loading inspections.

## RIGGING THE M11 OR M296, 2 1/2-TON POLE-TYPE UTILITY TRAILER



### Section I. Low-Velocity Airdrop

#### 2-1. Description of Load

The M11 or M296, 2 1/2-ton pole-type utility trailer is rigged on a 12-foot, type II, modular platform. The load requires either one or two G-11A or G-11B cargo parachutes, depending on the weight of the accompanying load. When the trailer is rigged with an accompanying load, the load may consist of ammunition, gasoline, rations, repair parts,

or similar items. The maximum weight of the accompanying load is 3,000 pounds. The procedures in this chapter may be used to rig any 2 1/2-ton pole-type utility trailer of the same basic design. Other models of the 2 1/2-ton pole-type utility trailer may differ in weight, dimensions, and center of balance (CB). Some may be altered by adding items

such as air tanks, hoses, or stands. This load may be airdropped from a C-130 or C-141 aircraft.

## 2-2. Preparing Platform

Prepare a 12-foot, type II, modular platform as shown in figures 2-1 and 2-2 and as follows:

**a. Inspecting Platform.** Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-208-20&P/TO 13C3-4-12.

**b. Installing Suspension Slings.** Use four 12-foot slings and four 3-foot slings as suspension slings. Use either 3-loop, type X nylon or 2-loop, type XXVI nylon.

**c. Positioning and Securing Strongbacks.** Build three strongbacks as outlined

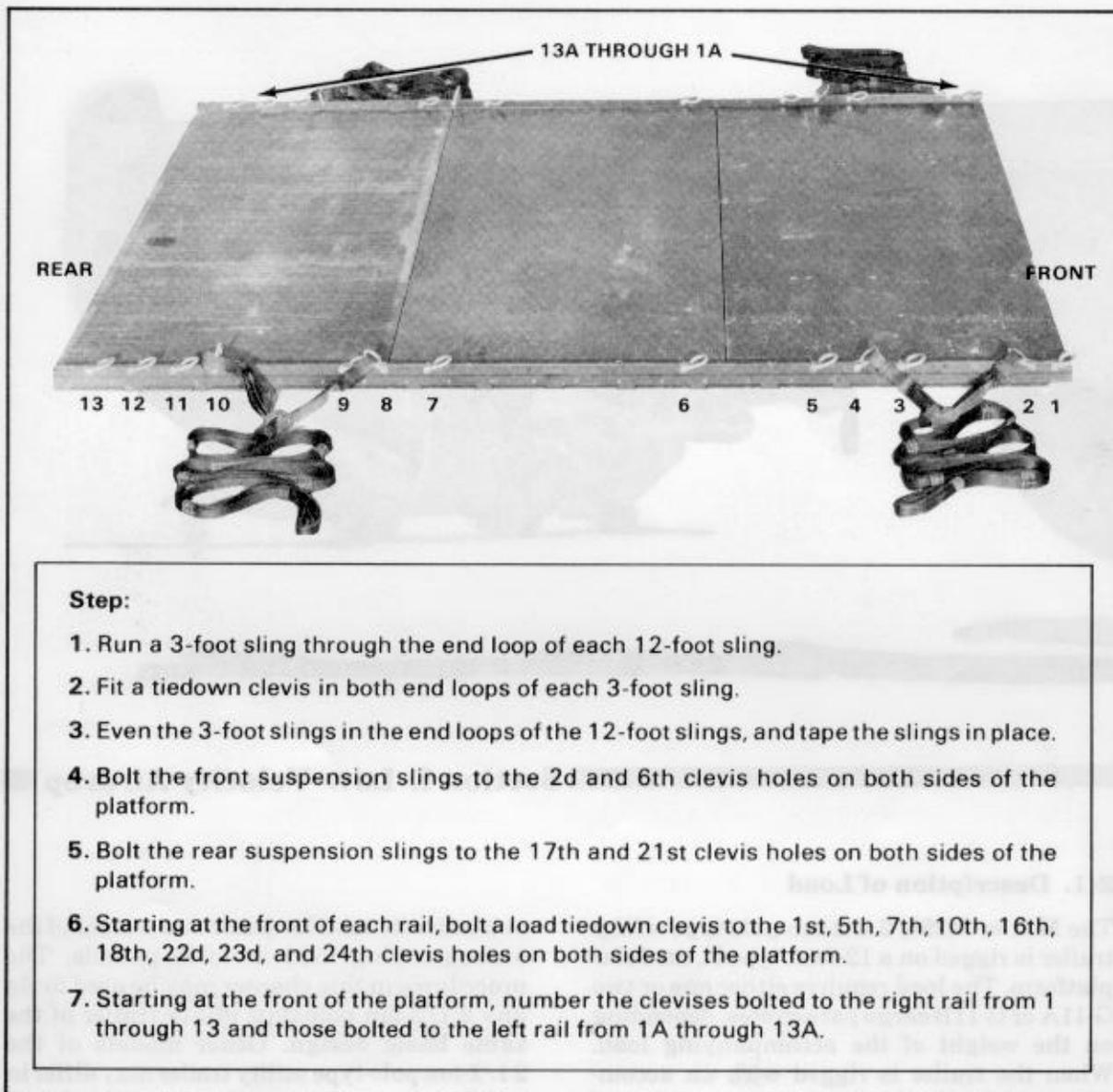


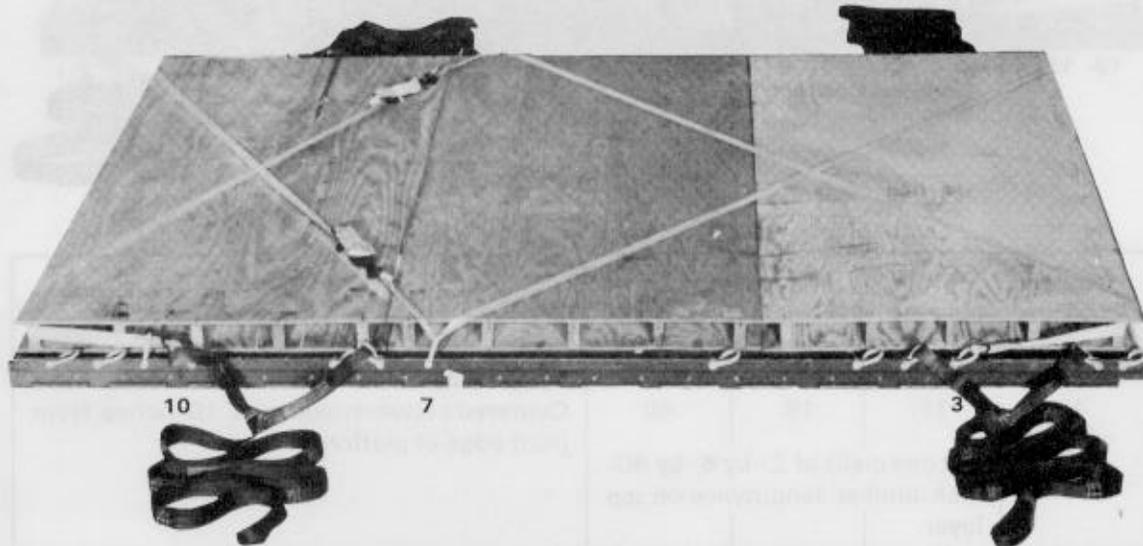
Figure 2-1. Platform prepared.

in TM 10-1670-208-20&P/TO 13C3-4-12 using 1/2-inch plywood. Position and secure them to the platform as shown in figure 2-2.

### 2-3. Building and Placing Honeycomb Stacks

Build five honeycomb stacks, and add lumber to stacks 1 and 2. Place the stacks on the platform as shown in figure 2-3. If necessary,

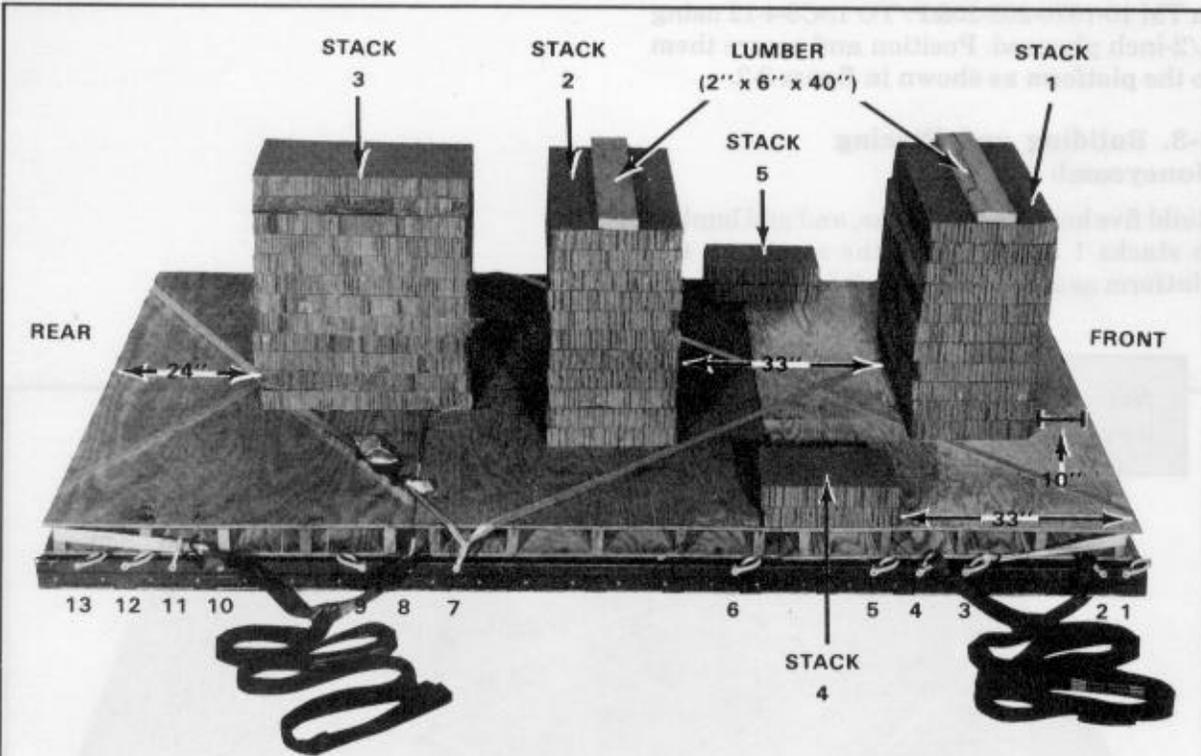
**Note:** Position honeycomb stacks so that they will not interfere with the binders.



#### Step:

1. Center a strongback on each panel.
2. Fit a tiedown strap on clevises 3, 3A, 10, and 10A by passing the strap through the clevis and then through its own D-ring.
3. Run the straps from clevises 3 and 3A around the end of the first strongback and through clevises 7 and 7A. Fit a D-ring on the end of each strap.
4. Run the straps from clevises 10 and 10A around the end of the third strongback, and join them with a D-ring and a load binder to the straps routed in step 3 above.

*Figure 2-2. Strongbacks positioned and secured.*



STACK NUMBER	PIECES	WIDTH (inches)	LENGTH (inches)	INSTRUCTIONS
1	11 Put one piece of 2- by 6- by 40- inch lumber lengthwise on top layer.	18	40	Place stack: Centered between side rails, 10 inches from front edge of platform.
2	Same as stack 1.			Centered, 33 inches behind stack 1.
3	12	18	30	Centered, lengthwise, 24 inches from rear edge of platform.
4	2	12	18	33 inches from front edge of platform, flush with outside edge of strongback, right side.
5	Same as stack 4.			33 inches from front edge of platform, flush with outside edge of strongback, left side.

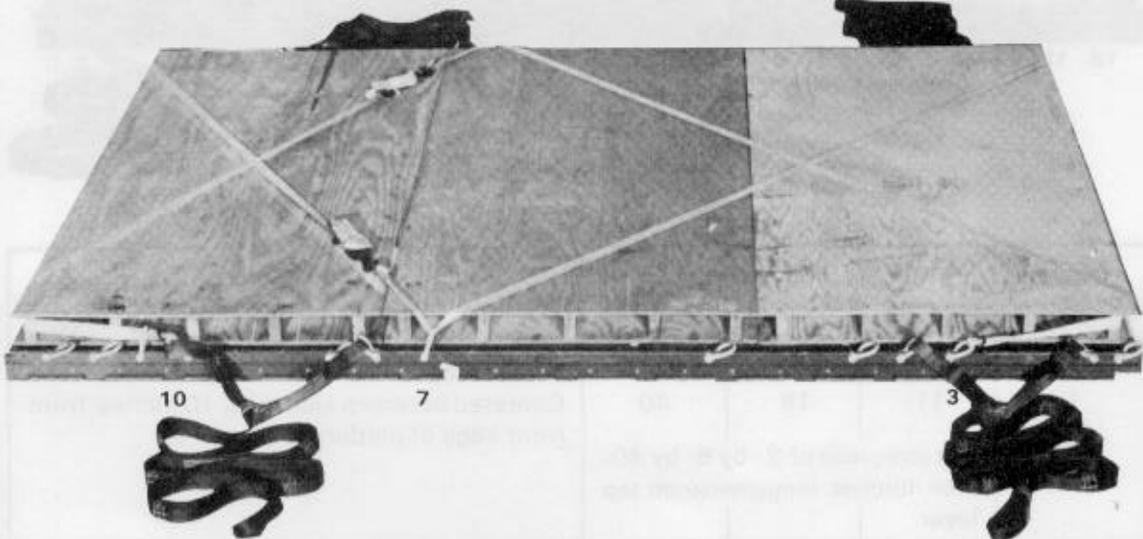
Figure 2-3. Honeycomb placed on platform.

in TM 10-1670-208-20&P/TO 13C3-4-12 using 1/2-inch plywood. Position and secure them to the platform as shown in figure 2-2.

**2-3. Building and Placing Honeycomb Stacks**

Build five honeycomb stacks, and add lumber to stacks 1 and 2. Place the stacks on the platform as shown in figure 2-3. If necessary,

**Note:** Position honeycomb stacks so that they will not interfere with the binders.



- Step:**
1. Center a strongback on each panel.
  2. Fit a tiedown strap on clevises 3, 3A, 10, and 10A by passing the strap through the clevis and then through its own D-ring.
  3. Run the straps from clevises 3 and 3A around the end of the first strongback and through clevises 7 and 7A. Fit a D-ring on the end of each strap.
  4. Run the straps from clevises 10 and 10A around the end of the third strongback, and join them with a D-ring and a load binder to the straps routed in step 3 above.

*Figure 2-2. Strongbacks positioned and secured.*

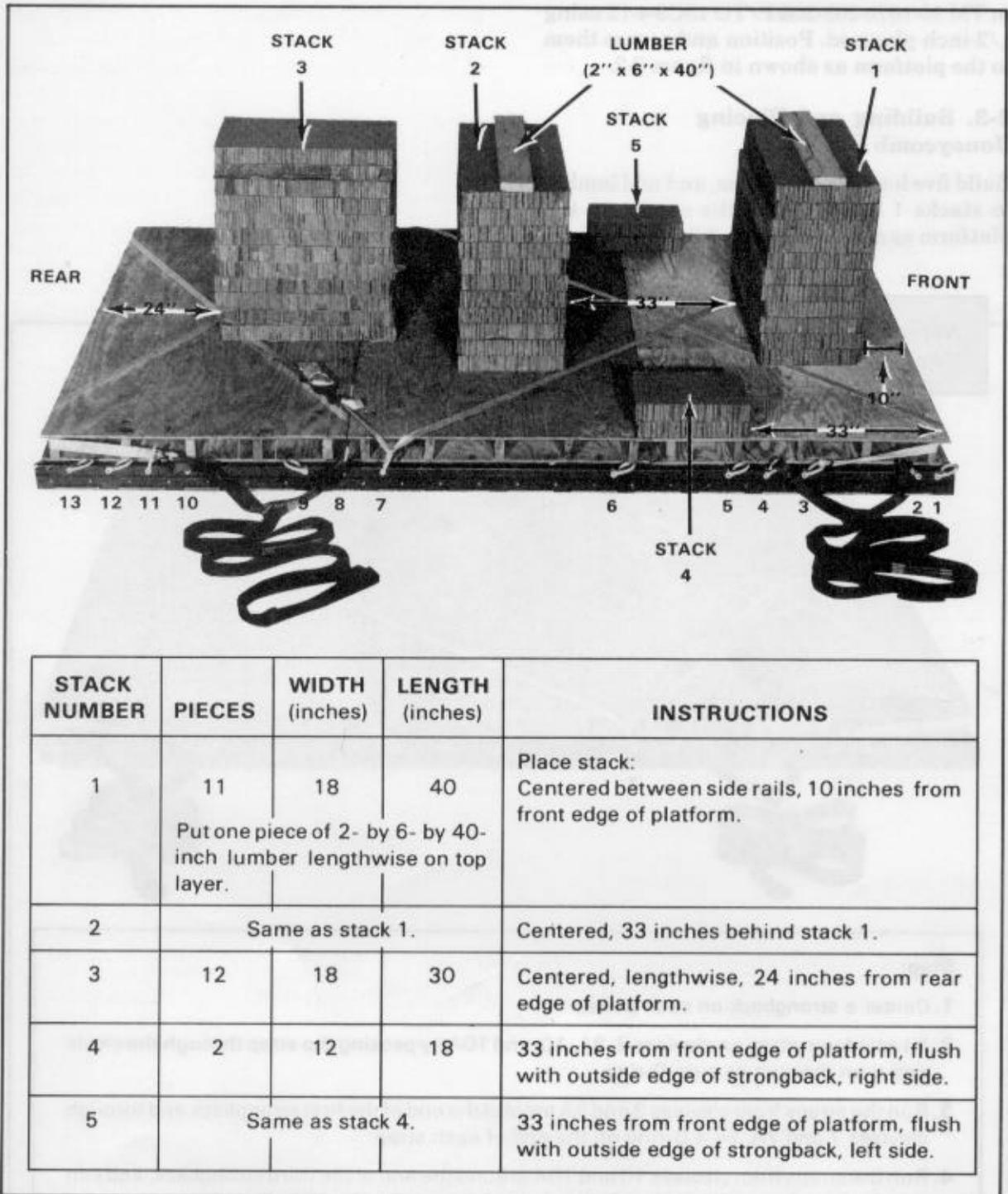


Figure 2-3. Honeycomb placed on platform.

move the honeycomb stacks for other models of the 2 1/2-ton pole-type utility trailer to support the load properly.

#### 2-4. Preparing Trailer

Prepare the trailer as shown in figure 2-4. Other models of the utility trailer may require additional preparation.

#### 2-5. Stowing Accompanying Load

When an accompanying load is included on the trailer, make sure the load does not weigh more than 3,000 pounds. Make sure it meets

the requirements and complies with the restrictions outlined in FM 10-500/TO 13C7-1-5. The load shown in this chapter consists of 24 boxes of ammunition that weigh 2,640 pounds. Place one layer of honeycomb on the trailer bed for all supply loads except ammunition. Two layers of honeycomb **MUST** be used on ammunition loads. Stow the load as shown in figure 2-5.

#### 2-6. Positioning Trailer

Use four 9-foot slings to lift the trailer into position. Center the trailer on the honeycomb as shown in figure 2-6.

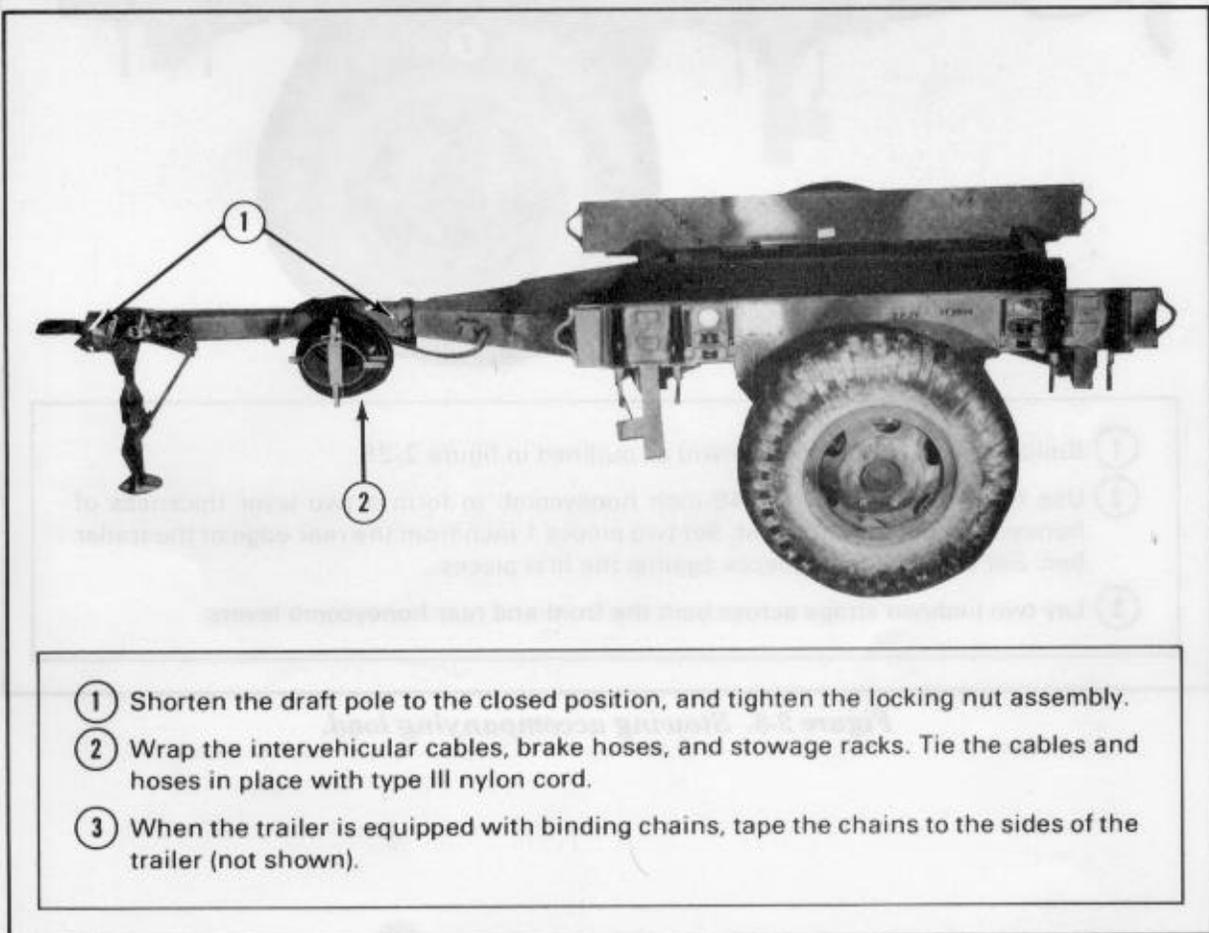
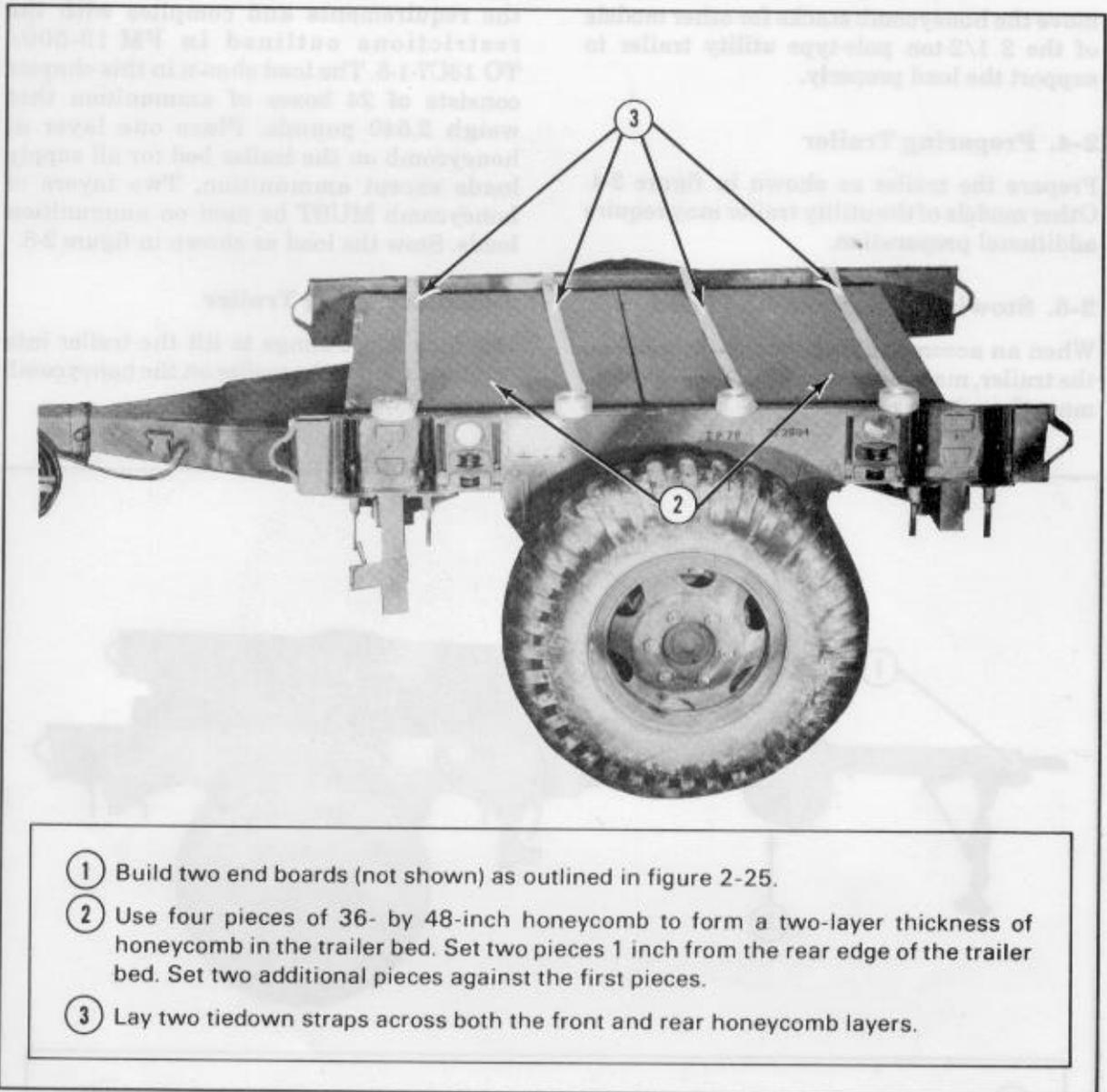
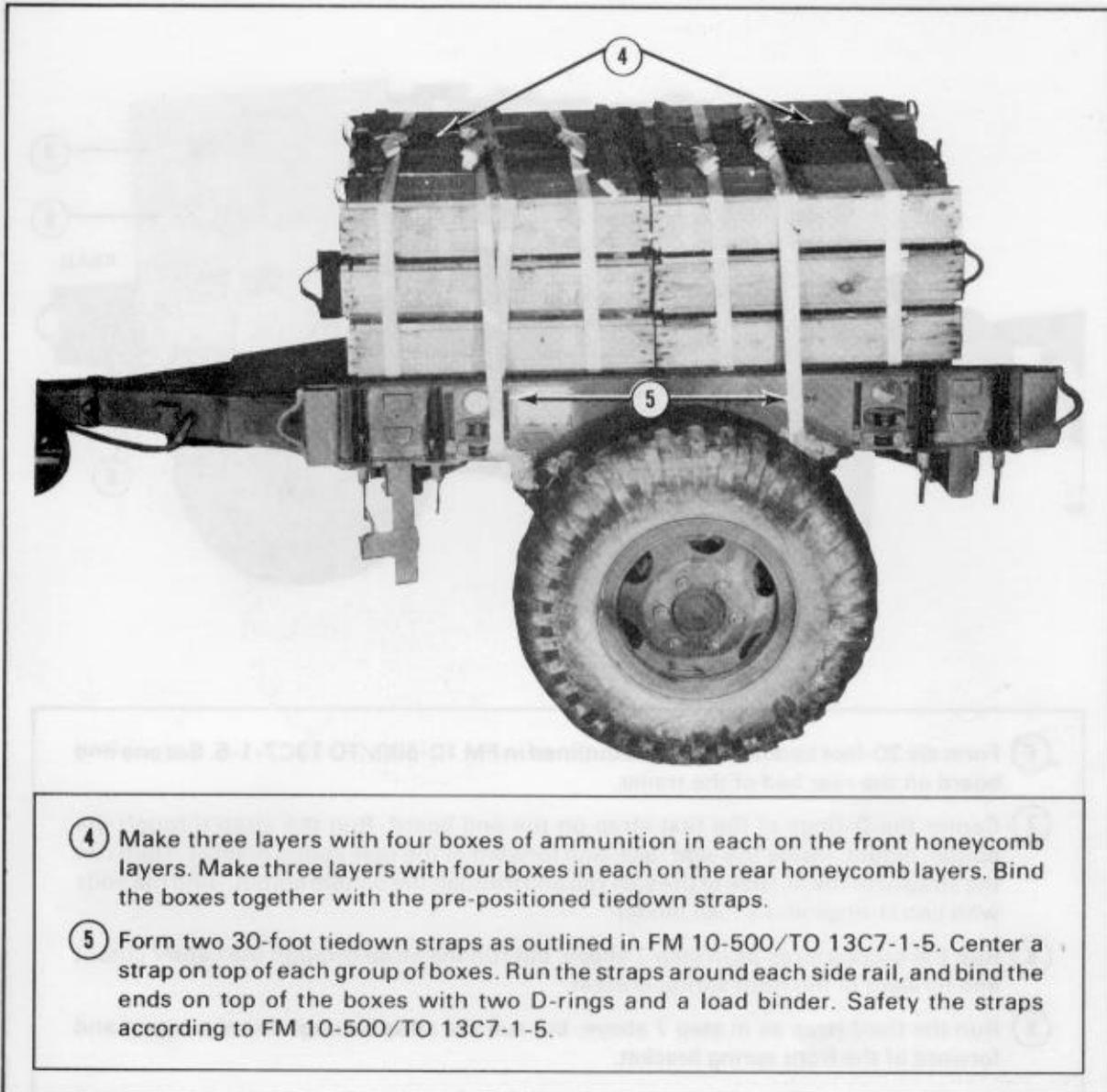


Figure 2-4. Trailer prepared.

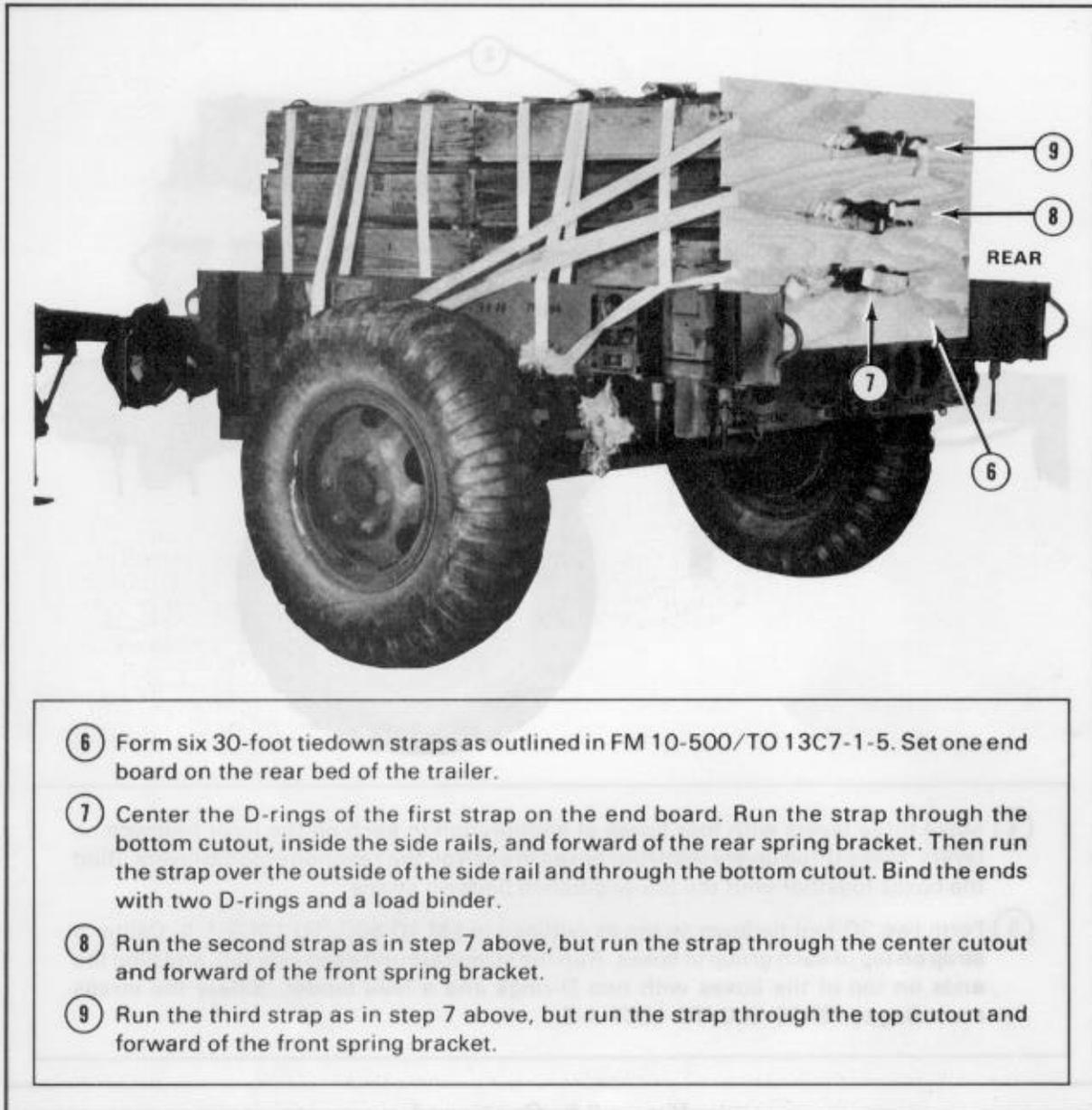


*Figure 2-5. Stowing accompanying load.*



- ④ Make three layers with four boxes of ammunition in each on the front honeycomb layers. Make three layers with four boxes in each on the rear honeycomb layers. Bind the boxes together with the pre-positioned tiedown straps.
- ⑤ Form two 30-foot tiedown straps as outlined in FM 10-500/TO 13C7-1-5. Center a strap on top of each group of boxes. Run the straps around each side rail, and bind the ends on top of the boxes with two D-rings and a load binder. Safety the straps according to FM 10-500/TO 13C7-1-5.

*Figure 2-5. Continued.*



- ⑥ Form six 30-foot tiedown straps as outlined in FM 10-500/TO 13C7-1-5. Set one end board on the rear bed of the trailer.
- ⑦ Center the D-rings of the first strap on the end board. Run the strap through the bottom cutout, inside the side rails, and forward of the rear spring bracket. Then run the strap over the outside of the side rail and through the bottom cutout. Bind the ends with two D-rings and a load binder.
- ⑧ Run the second strap as in step 7 above, but run the strap through the center cutout and forward of the front spring bracket.
- ⑨ Run the third strap as in step 7 above, but run the strap through the top cutout and forward of the front spring bracket.

*Figure 2-5. Continued.*

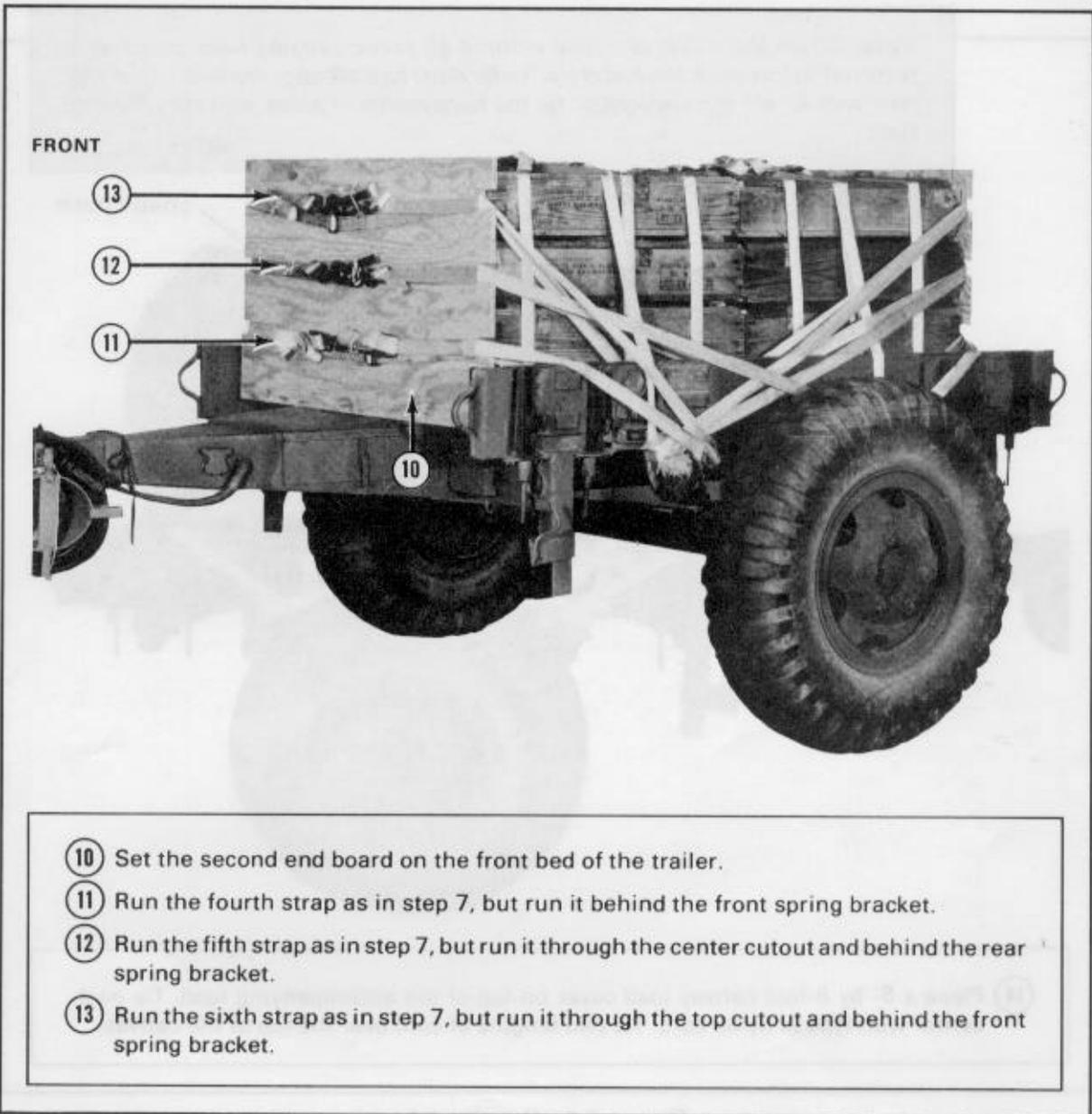
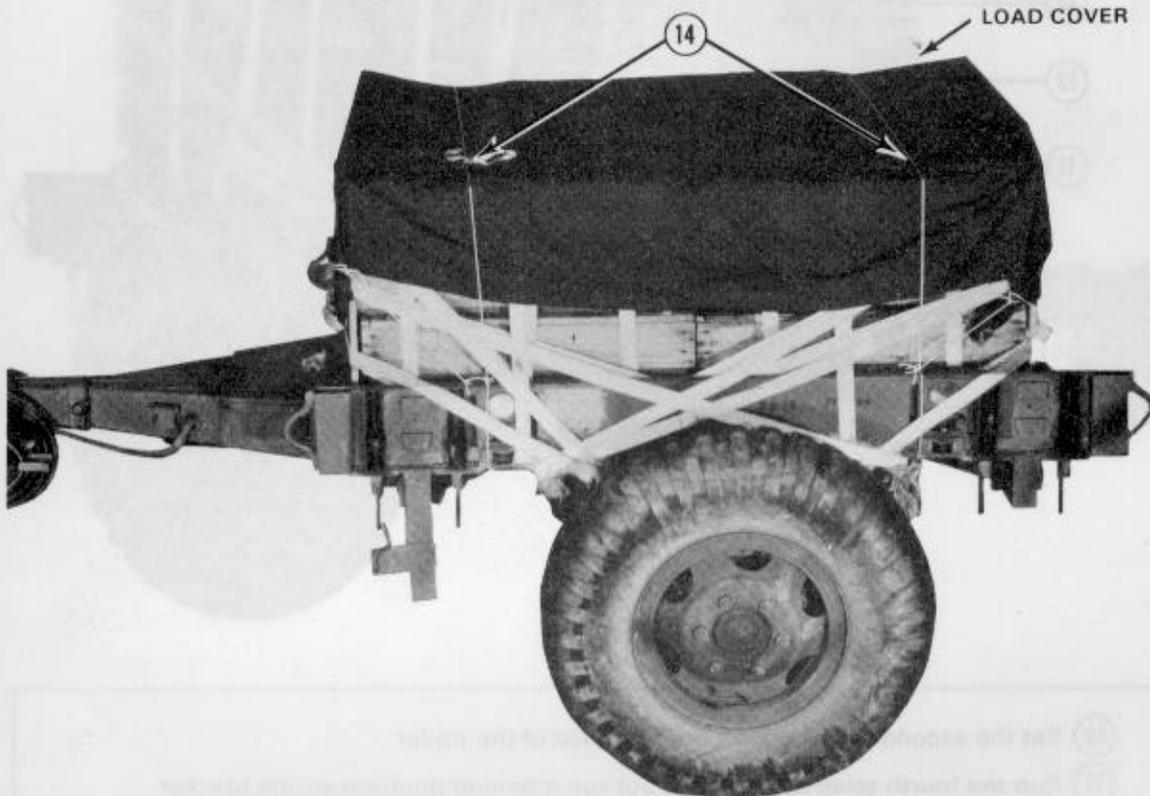


Figure 2-5. Continued.

**Note:** When the trailer is rigged without an accompanying load, no cover is required. In this case, the bed of the trailer must be built up to the level of the side rails with layers of honeycomb. Tie the honeycomb in place with type III nylon cord.



- ⑭ Place a 6- by 8-foot canvas load cover on top of the accompanying load. Tie each corner with type III nylon cord. Tie two lengths of cord over the top of the canvas.

*Figure 2-5. Continued.*

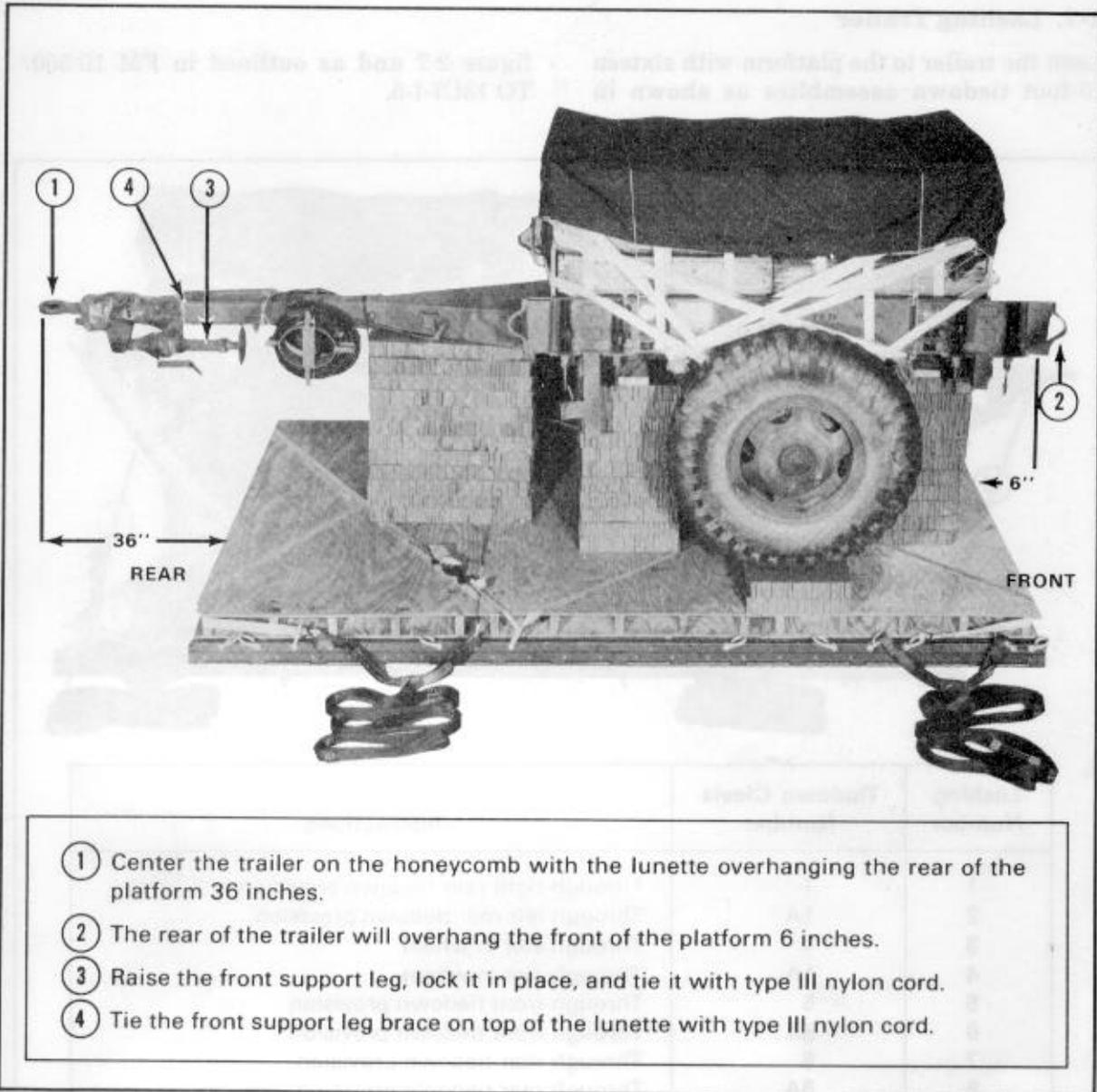
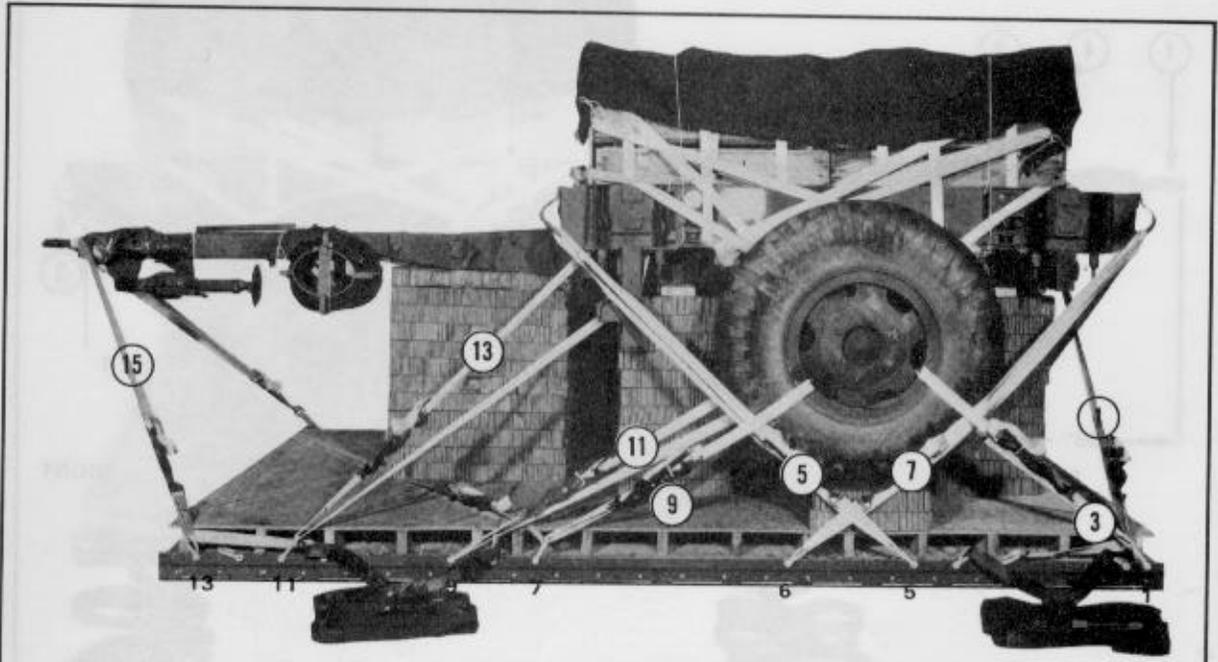


Figure 2-6. Trailer positioned on platform.

2-7. Lashing Trailer

Lash the trailer to the platform with sixteen 15-foot tiedown assemblies as shown in

figure 2-7 and as outlined in FM 10-500/TO 13C7-1-5.



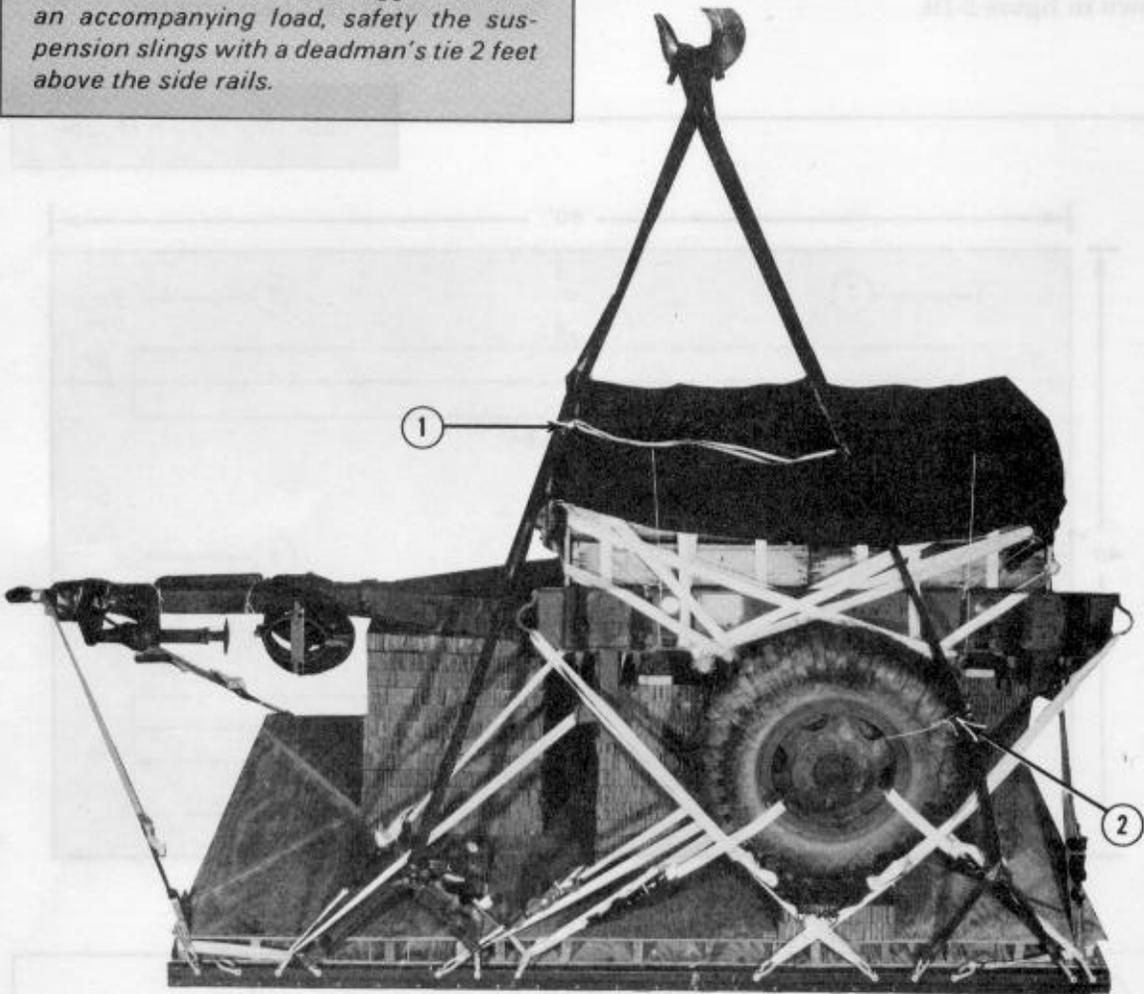
Lashing Number	Tiedown Clevis Number	Instructions
1	1	Through right rear tiedown provision
2	1A	Through left rear tiedown provision
3	1	Through slot in wheel
4	1A	Through slot in wheel
5	5	Through front tiedown provision
6	5A	Through front tiedown provision
7	6	Through rear tiedown provision
8	6A	Through rear tiedown provision
9	7	Through slot in wheel
10	7A	Through slot in wheel
11	9	Around the axle
12	9A	Around the axle
13	11	Around the front cross member, inside the side rail
14	11A	Around the front cross member, inside the side rail
15	13	Around lunette
16	13A	Around lunette

Figure 2-7. Trailer lashed to platform.

**2-8. Safeying Suspension Slings**

Raise the suspension slings to their highest point, and safety them with a deadman's tie according to FM 10-500/TO 13C7-1-5 and figure 2-8.

**Note:** When the trailer is rigged without an accompanying load, safety the suspension slings with a deadman's tie 2 feet above the side rails.



- ① Tie the slings level with the top of the accompanying load with two lengths of 1/2-inch tubular nylon webbing.
- ② Tie the front slings to the tire with type III nylon cord.

*Figure 2-8. Suspension slings safetied.*

**2-9. Building Stowage Platform and Stowing Cargo Parachutes**

Prepare the stowage platform, and stow the cargo parachutes as follows:

**a. Building and Lashing Stowage Platform.** Build a stowage platform for the cargo parachutes as shown in figure 2-9. Lash the stowage platform to the platform as shown in figure 2-10.

**b. Stowing Cargo Parachutes.** Prepare either two G-11A or two G-11B cargo parachutes as outlined in FM 10-500/TO 13C7-1-5, and stow the parachutes as shown in figure 2-11. When the weight of the accompanying load varies, the parachute requirement **MUST** be computed.

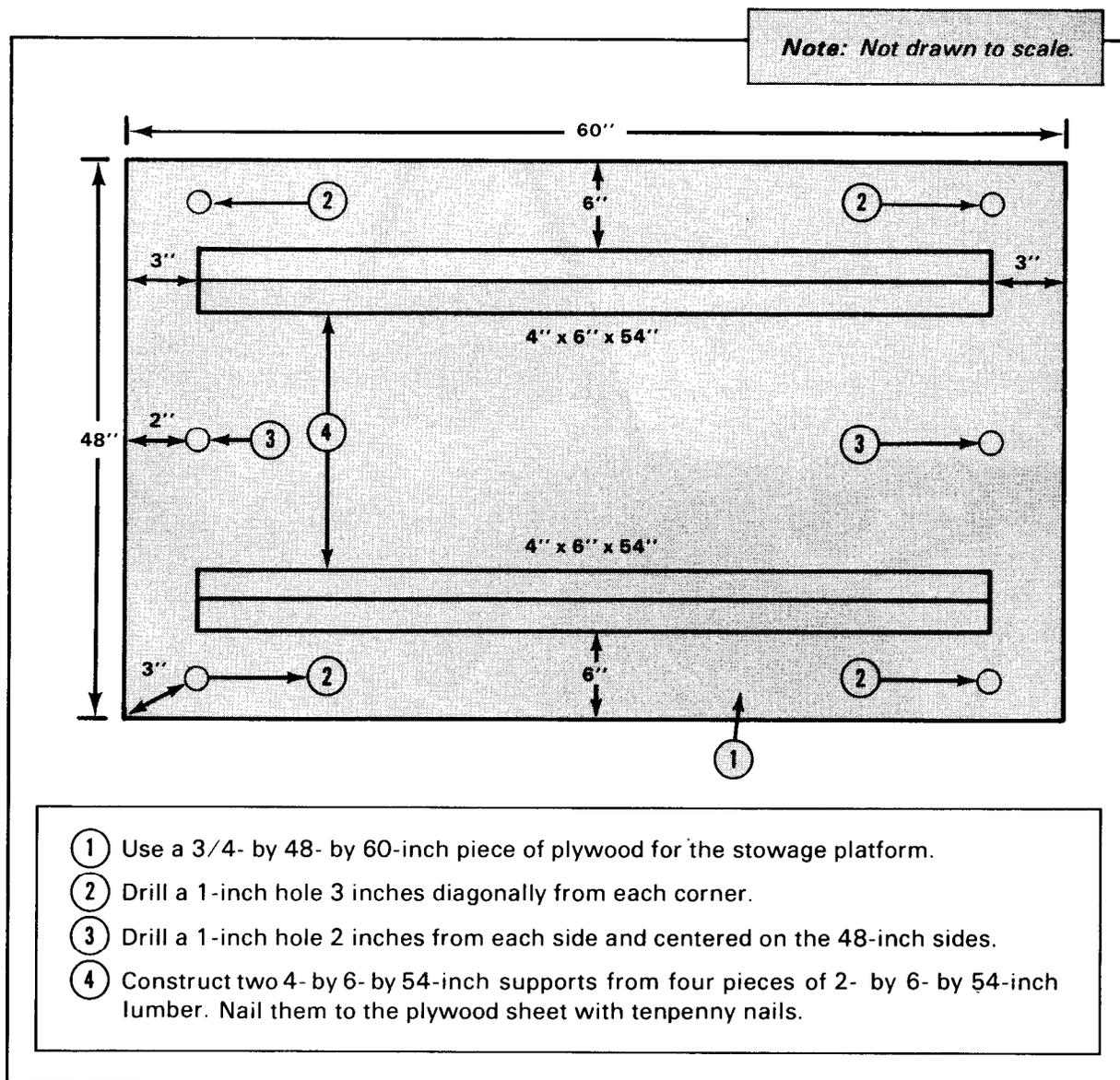
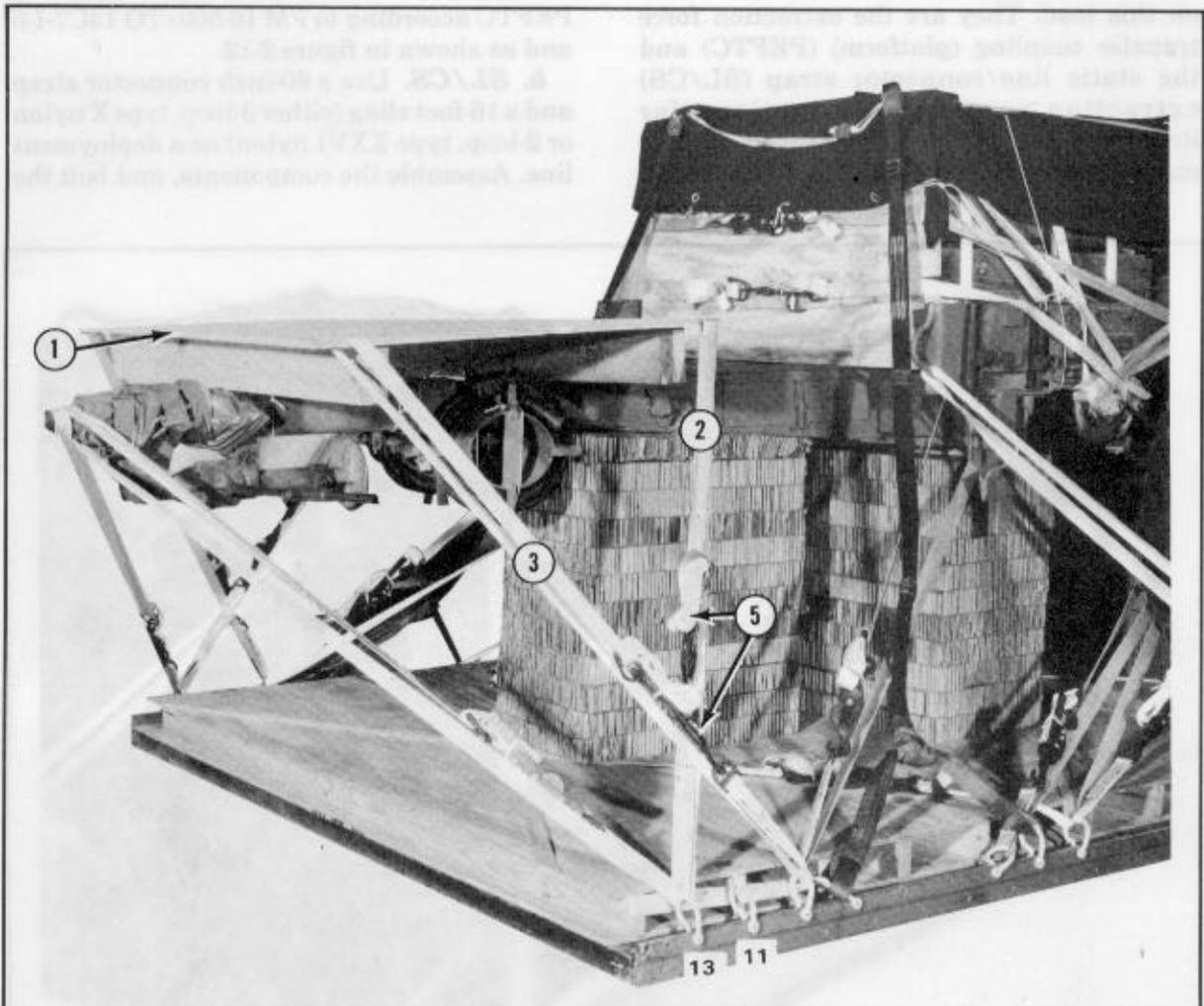


Figure 2-9. Construction details for the stowage platform.



- ① Set the stowage platform on the drawbar 14 inches from the front of the lunette.
- ② Run a tiedown strap through clevis 13 and the front hole in the stowage platform.
- ③ Run a tiedown strap through clevis 11 and the rear hole in the stowage platform.
- ④ Run a tiedown strap through clevis 13A and the front hole in the stowage platform. Run a tiedown strap through clevis 11A and the rear hole in the stowage platform (not shown).
- ⑤ Bind the ends of the straps with D-rings and load binders. Close all load binders at the same time.

*Figure 2-10. Stowage platform secured.*

## 2-10. Installing Extraction System

One of two extraction systems may be used on this load. They are the extraction force transfer coupling (platform) (PEFTC) and the static line/connector strap (SL/CS) extraction systems. Instructions for installing both systems are given in this manual. However, only the PEFTC is shown.

**a. PEFTC.** Install the components of the PEFTC according to FM 10-500/TO 13C7-1-5 and as shown in figure 2-12.

**b. SL/CS.** Use a 60-inch connector strap and a 16-foot sling (either 3-loop, type X nylon or 2-loop, type XXVI nylon) as a deployment line. Assemble the components, and bolt the

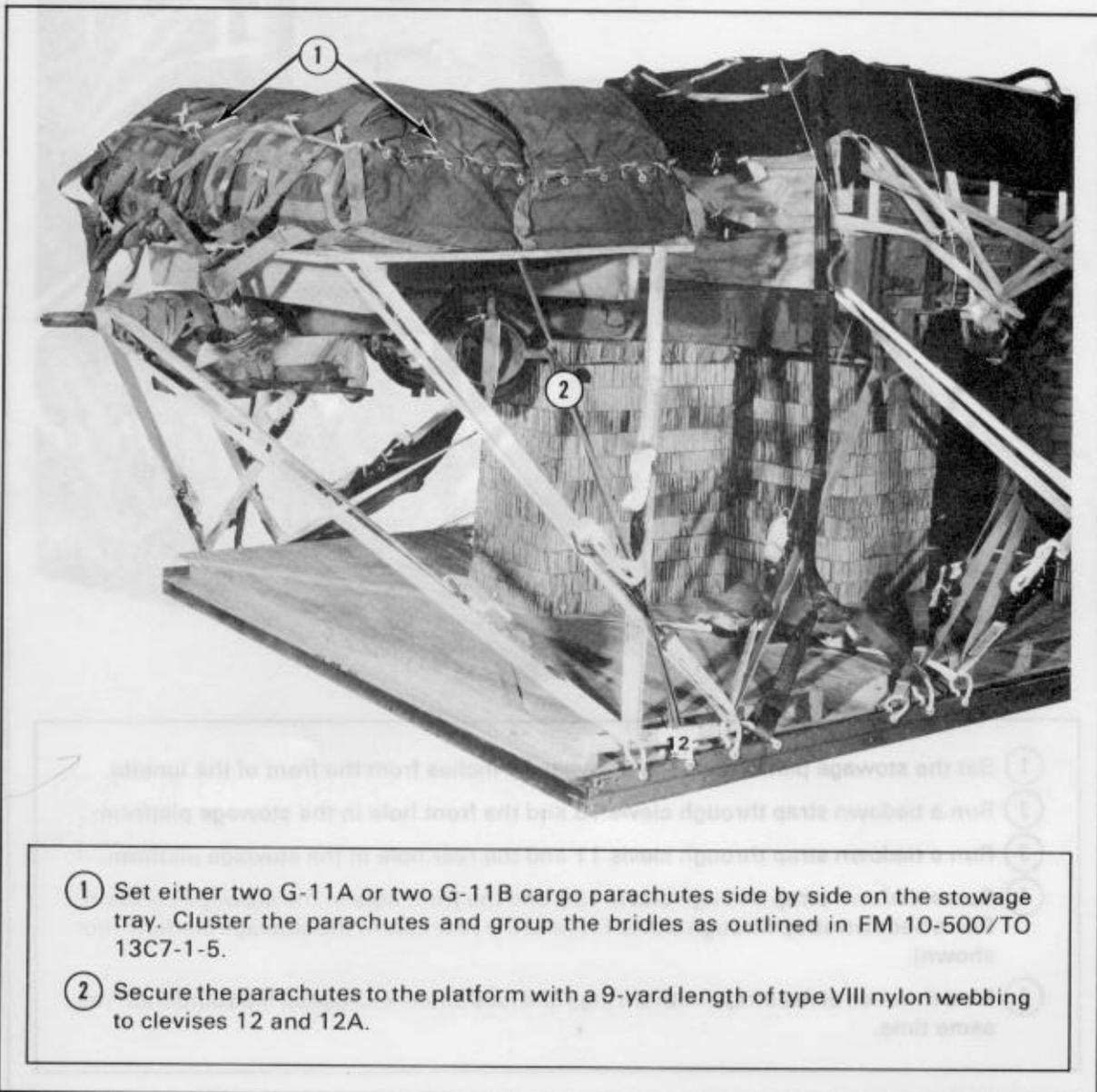


Figure 2-11. Cargo parachutes stowed.

SL/CS to the lunette of the trailer according to FM 10-500/TO 13C7-1-5.

## 2-11. Installing Release Assemblies

**CAUTION:** Do not use the 5,000-pound-capacity cargo parachute release with the G-11B cargo parachute.

Prepare and attach either the M-1 parachute release or two 5,000-pound-capacity cargo parachute releases according to FM 10-500/TO 13C7-1-5.

## 2-12. Placing Extraction Parachute

When the weight of the accompanying load varies from the load in this chapter, the

parachute requirement must be computed. The type of aircraft will also be a determining factor in the type and size of extraction parachute required. Follow the tables in FM 10-500/TO 13C7-1-5 to determine the parachute needed. The information below pertains to the accompanying load shown in this chapter.

**a. C-130 Aircraft.** Place a 15-foot unreefed cargo extraction parachute on the load for installation in the aircraft. A 60-foot, type X or type XXVI, nylon webbing extraction line should be used.

**b. C-141 Aircraft.** Place a 15-foot cargo extraction parachute (either reefed or unreefed) on the load for installation in the aircraft. The parachute needs a continuous 160-foot, 1-loop, type XXVI, nylon webbing extraction line. The extraction line is connected to the 36-inch adapter web of the parachute with a type IV link assembly.

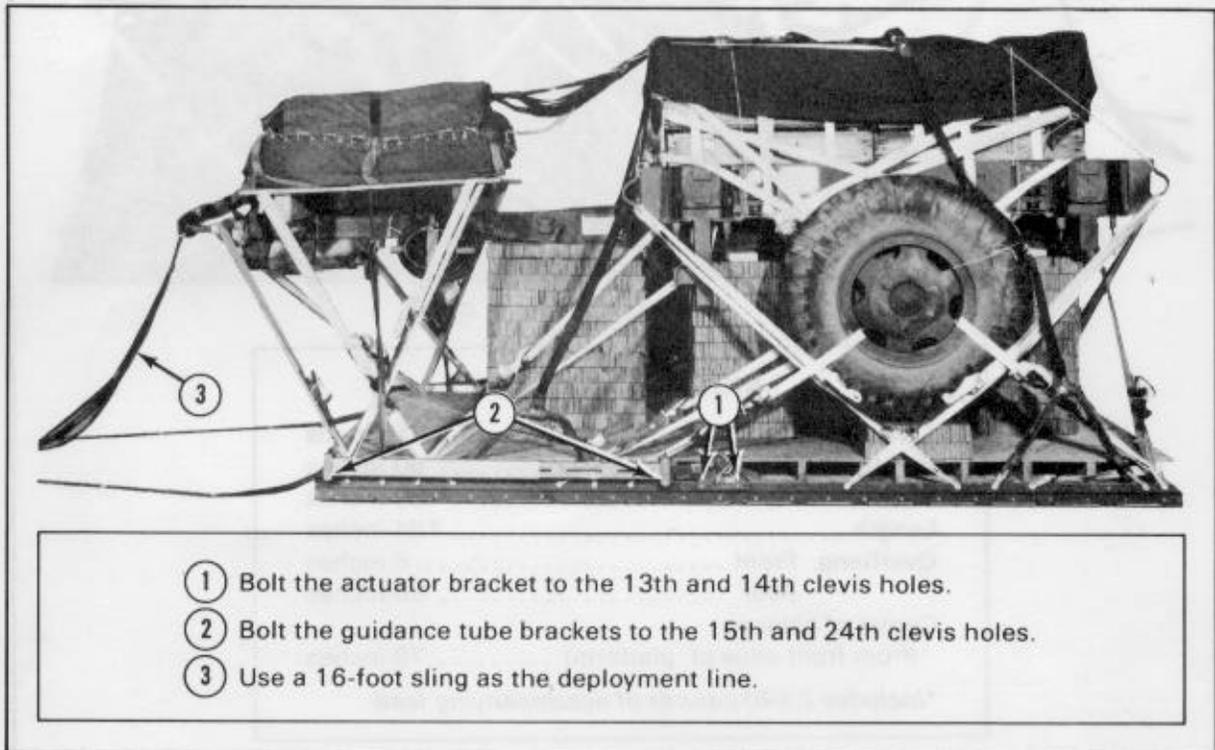
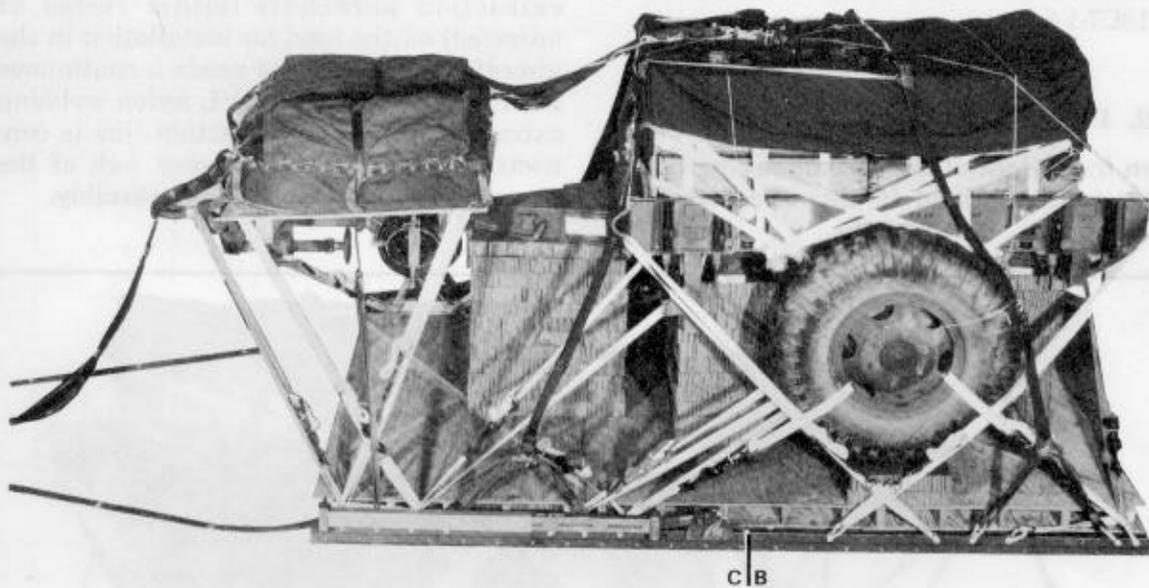


Figure 2-12. PEFTC installed.

### 2-13. Marking Rigged Load

Mark the rigged load as outlined in FM 10-500/TO 13C7-1-5 and as shown in figure 2-13. If the weight of the accompanying load differs from that shown in figure 2-13, the weight, center of balance, and parachute requirements must be computed.

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



#### RIGGED LOAD DATA

*Weight .....	7,210 pounds
Height .....	80 inches
Width .....	108 inches
Length .....	184 inches
Overhang: Front .....	6 inches
Rear .....	36 inches
Center of balance (from front edge of platform) .....	70 inches

*\*Includes 2,640 pounds of accompanying load*

Figure 2-13. The 2 1/2-ton, pole-type utility trailer rigged for a low-velocity aidrop.

**2-14. Equipment Required**

The equipment needed to prepare and rig the 2 1/2-ton pole-type trailer with an accompanying load for a low-velocity airdrop is listed in table 2-1. The equipment required may vary with other accompanying loads.

*Table 2-1. Equipment required for rigging the 2 1/2-ton, pole-type utility trailer for low-velocity airdrop*

National Stock Number	Item	Quantity
1670-00-040-8215	Adapter web, 36-in (for 15-ft parachute)	1
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1377-00-958-1048	Cartridge, time-delay, 20-second (Use w 5,000-lb release.)	2
4030-00-090-5354	Clevis assembly, suspension, large	3
8305-00-242-3593	Cloth, cotton duck, 60-in	3 yd
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5783	*Coupling, airdrop, extraction force transfer, with 12-ft cable	1
1670-00-360-0328	Cover, clevis, large	2
8135-00-664-6958	Cushioning material, packaging, cellulose wad- ding	As required
	Line, extraction:	
1670-00-856-0265	60-ft (1-loop), type X (for C-130) <u>QR</u>	1
1670-01-064-4452	60-ft (1-loop), type XXVI (for C-130)	1
1670-01-107-7652	160-ft (1-loop), type XXVI (for C-141)	1
1670-00-783-5988	Link assembly, type IV (Use w 5,000-lb release.)	1
1670-00-799-8596	Load coupler, 8-spool	1
5510-00-220-6148	Lumber:	
	2- by 6- by 40-in	2
	2- by 6- by 54-in	4
5315-00-010-4661	Nail, steel wire, common, 10d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	7 sheets
	12- by 18-in	(4)
	18- by 30-in	(12)
	18- by 40-in	(22)

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*Table 2-1. Continued*

National Stock Number	Item	Quantity
1670-00-269-1107 1670-01-016-7841 1670-00-052-1548	<b>Parachute:</b> Cargo, 100-ft, G-11A <u>OR</u> Cargo, 100-ft, G-11B Cargo extraction, 15-ft	1 or 2 1 or 2 1
1670-00-893-1631 1670-00-893-1624 1670-00-893-1626 5320-00-893-1632	<b>Platform, air delivery, modular, 12-ft:</b> Clevis, load tiedown Panel Rail, platform, side, 12-ft Rivet, blind-drive type, 1/4-in diameter	16 3 2 48
5530-00-128-4981	Plywood, 3/4- by 48- by 60-in	1
1670-01-097-8816	Release, cargo parachute, M-1 (If not available, use one or two releases, cargo parachute, 5,000-lb-capacity, NSN 1377-00-799-8494.)	1
1670-00-753-3788 1670-01-062-6301	<b>Sling, cargo, airdrop:</b> For 5,000-lb-capacity releases: 3-ft (3-loop), type X <u>OR</u> 3-ft (2-loop), type XXVI	2 2
1670-00-823-5042 1670-01-063-7761	For deployment line: 16-ft (3-loop), type X <u>OR</u> 16-ft (2-loop), type XXVI	1 1
1670-00-823-5040 1670-01-063-7760 1670-00-823-5041 1670-01-062-6303	For lifting load: 11-ft (3-loop), type X <u>OR</u> 11-ft (2-loop), type XXVI 12-ft (3-loop), type X <u>OR</u> 12-ft (2-loop), type XXVI	2 2 1 1
1670-00-823-5043 1670-01-062-6302	For riser extension: 20-ft (2-loop), type X <u>OR</u> 20-ft (2-loop), type XXVI	2 2
1670-00-040-8219	Strap, parachute release, multicut	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	18
8305-00-268-2411 8305-00-263-3591 8505-00-082-5752	<b>Webbing:</b> Cotton, 80-lb Nylon, type VIII (restraint strap) Nylon, tubular, 1/2-in	As required 6 yd As required
*When this item is not used, the following items are needed for the SL/CS:		
1670-00-090-5354	Clevis assembly, suspension, large	1

Table 2-1. Continued

National Stock Number	Item	Quantity
1670-00-783-5988	Link assembly, type IV	1
1670-00-823-5041	Sling, cargo, 12-ft (3-loop), type X <u>OR</u>	1
1670-01-062-6303	Sling, cargo, 12-ft (2-loop), type XXVI	1
1670-00-998-0117	Static line, cargo parachute, breakaway-type, with release knife and clevis	2
1670-00-738-5878	Strap, connector, 60-in	1

## RIGGING THE M796 BOLSTER TRAILER FOR A LOW-VELOCITY AIRDROP



### 3-1. Description of Load

The M796 bolster trailer is rigged on a 16-foot, type II, modular platform with two G-11A or two G-11B cargo parachutes for a low-velocity airdrop. This load can be airdropped from a C-130 or C-141 aircraft.

### 3-2. Preparing Platform

Prepare a 16-foot, type II, modular platform (figure 3-1) as follows:

*a. Inspecting Platform.* Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-208-20&P/TO 13C3-4-12.

**b. Installing and Numbering Load Tiedown Clevises.** Bolt 20 load tiedown clevises to the platform rails, and number them as shown in figure 3-1.

**3-3. Building and Placing Honeycomb Stacks**

Build six honeycomb stacks, and glue the layers together. Place the stacks on the platform as shown in figure 3-2, and glue the stacks to the platform.

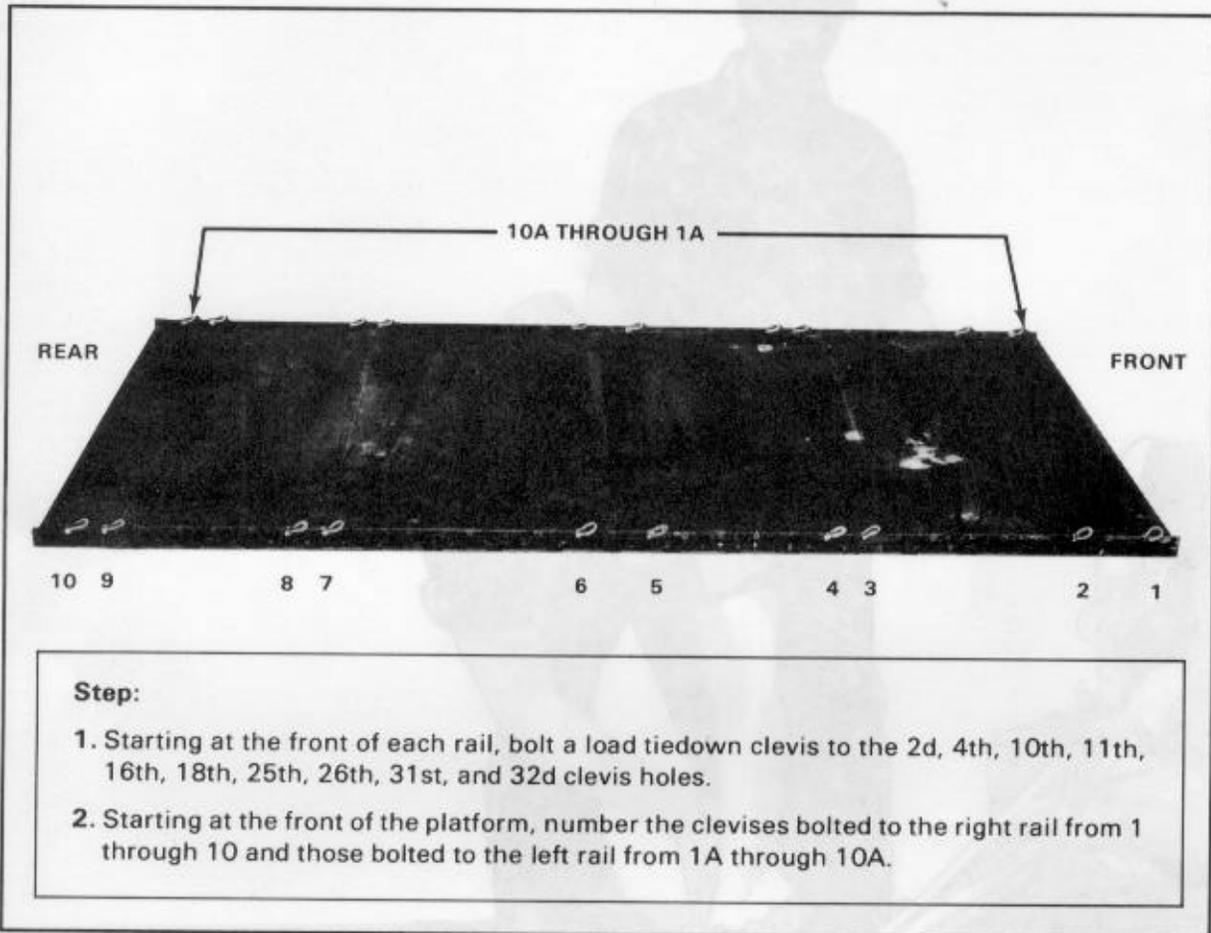


Figure 3-1. Platform prepared.

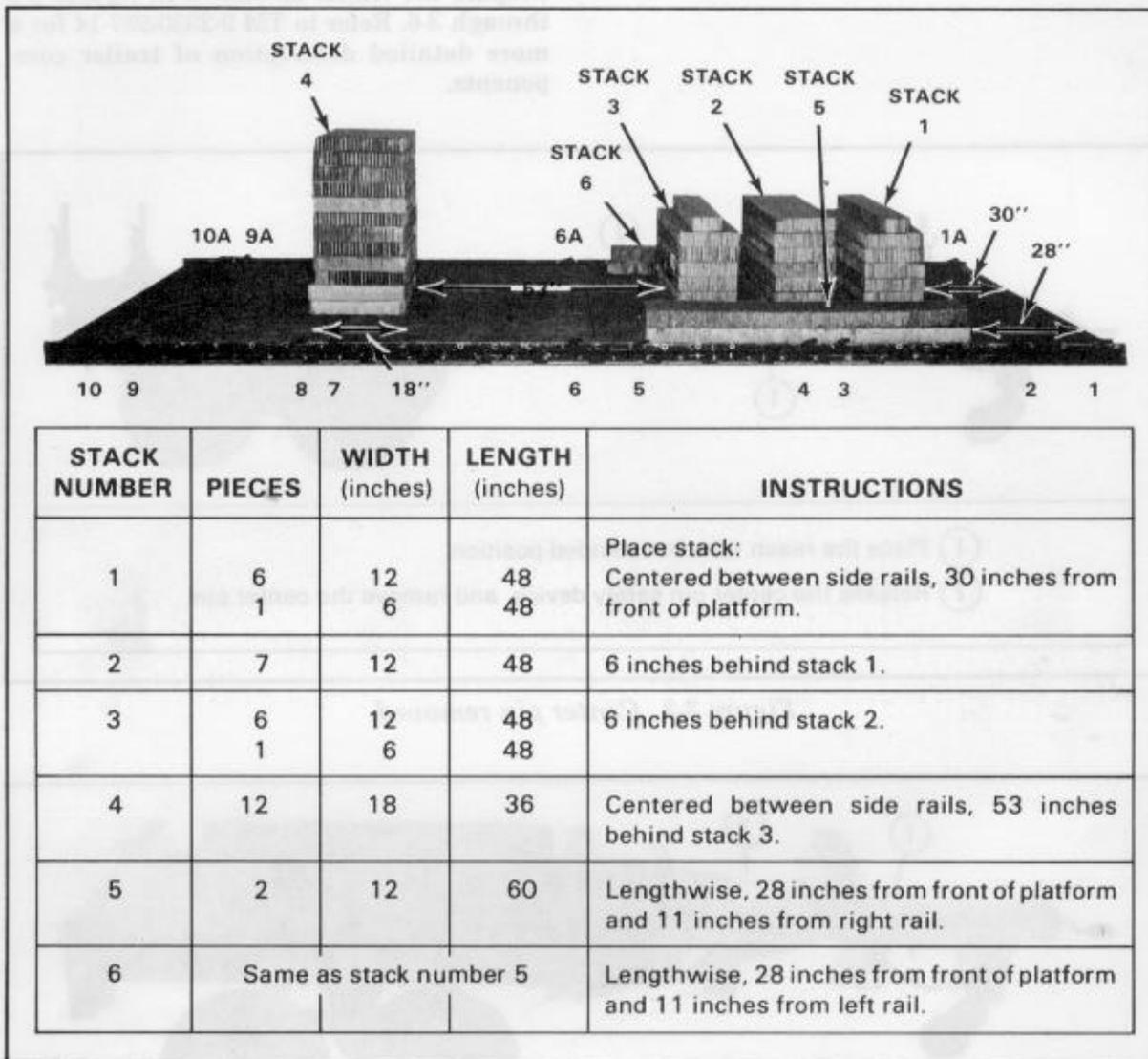


Figure 3-2. Honeycomb placed on platform.

### 3-4. Preparing Trailer

Prepare the trailer as shown in figures 3-3 through 3-6. Refer to TM 9-2330-287-14 for a more detailed description of trailer components.

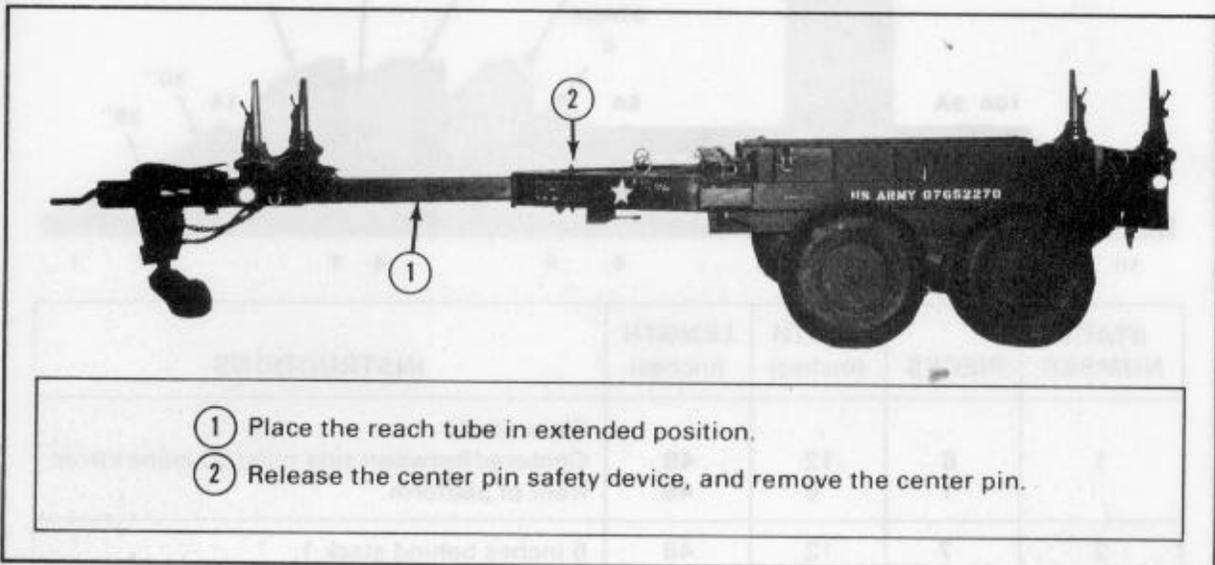


Figure 3-3. Center pin removed.

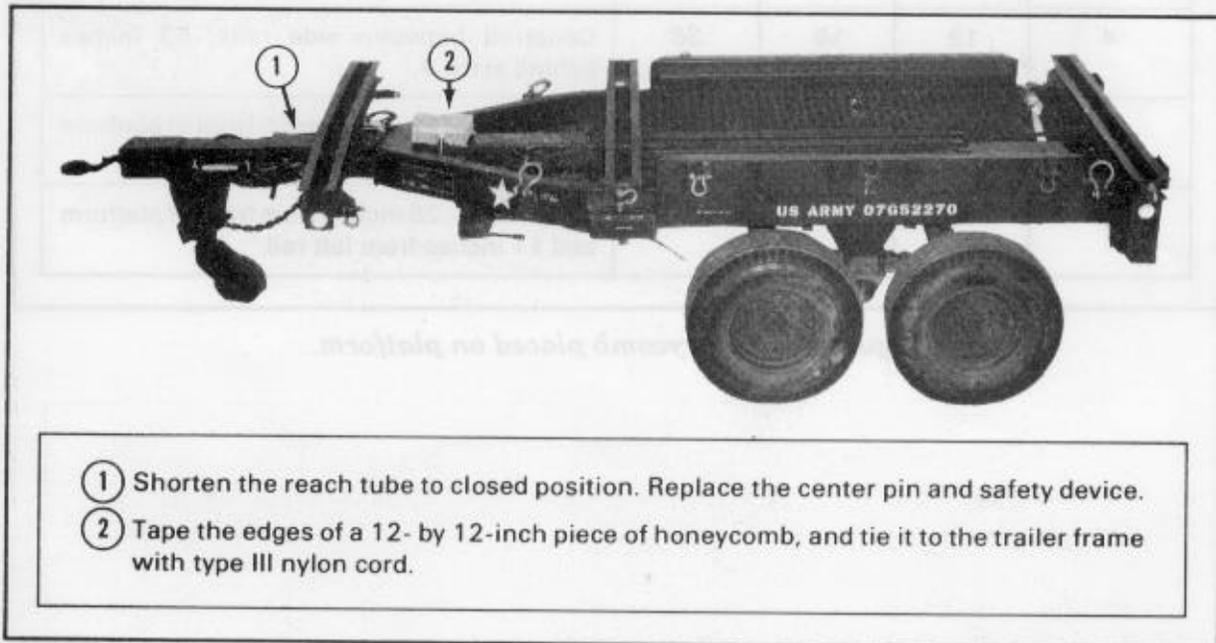


Figure 3-4. Reach tube retracted.

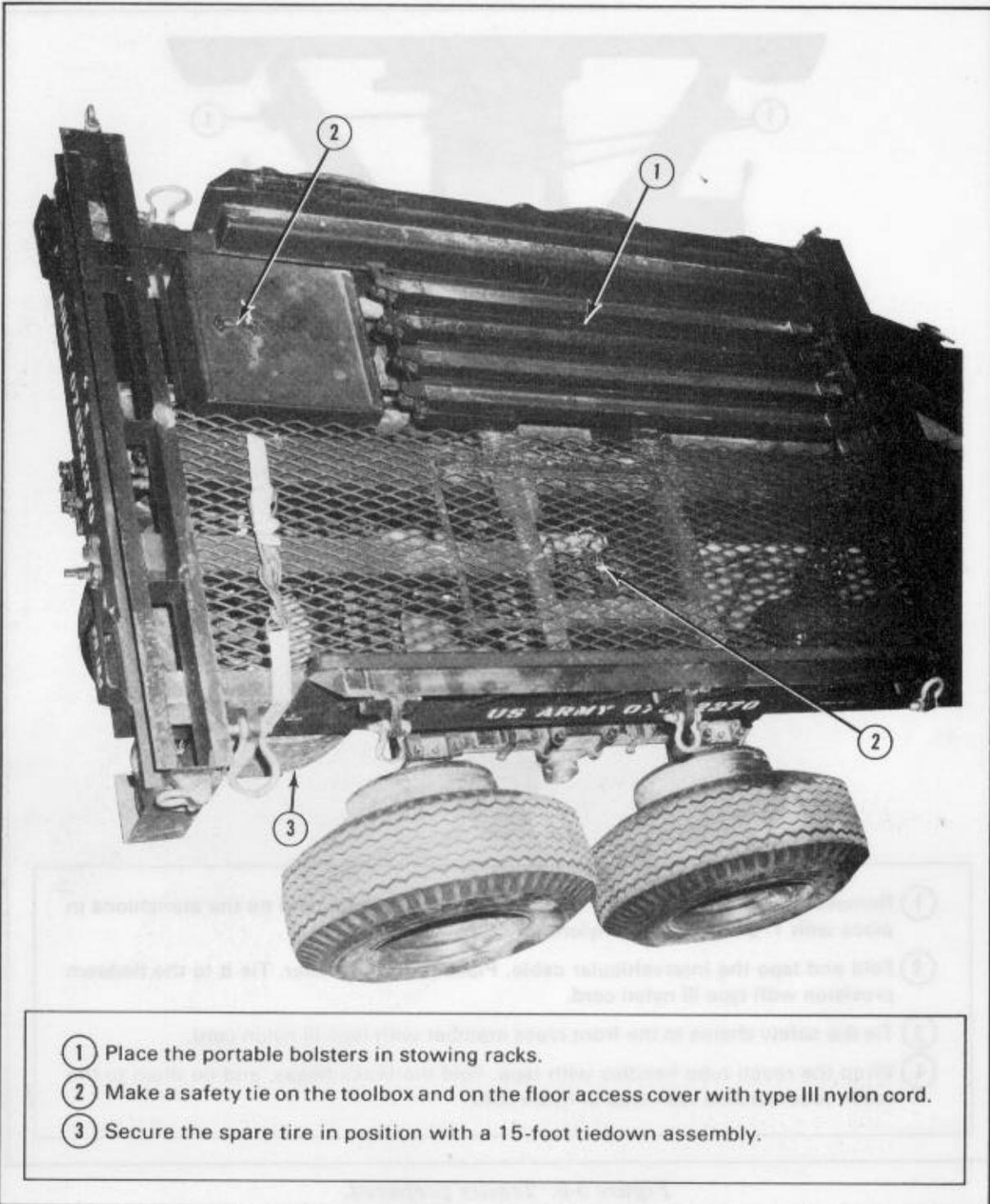
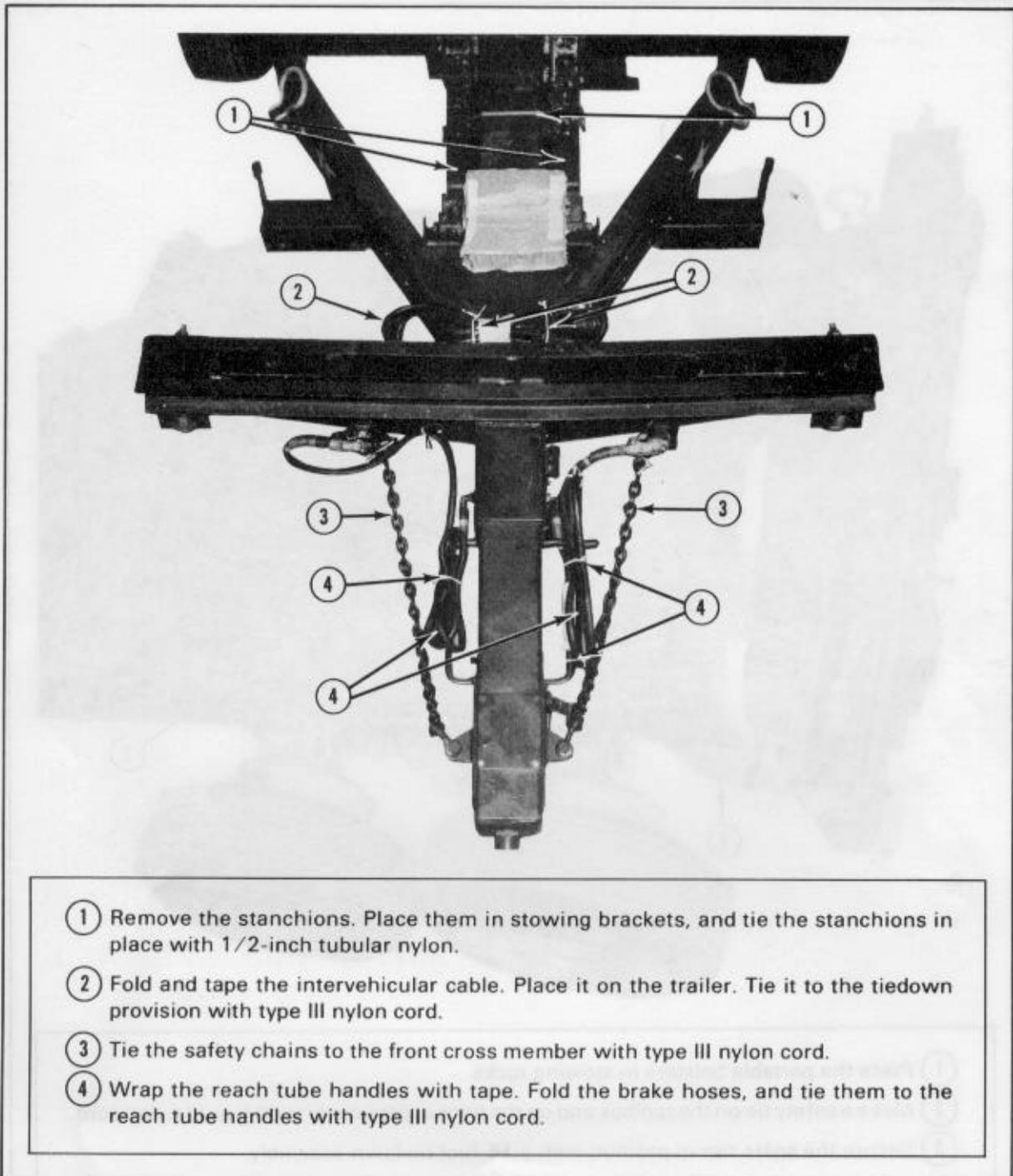


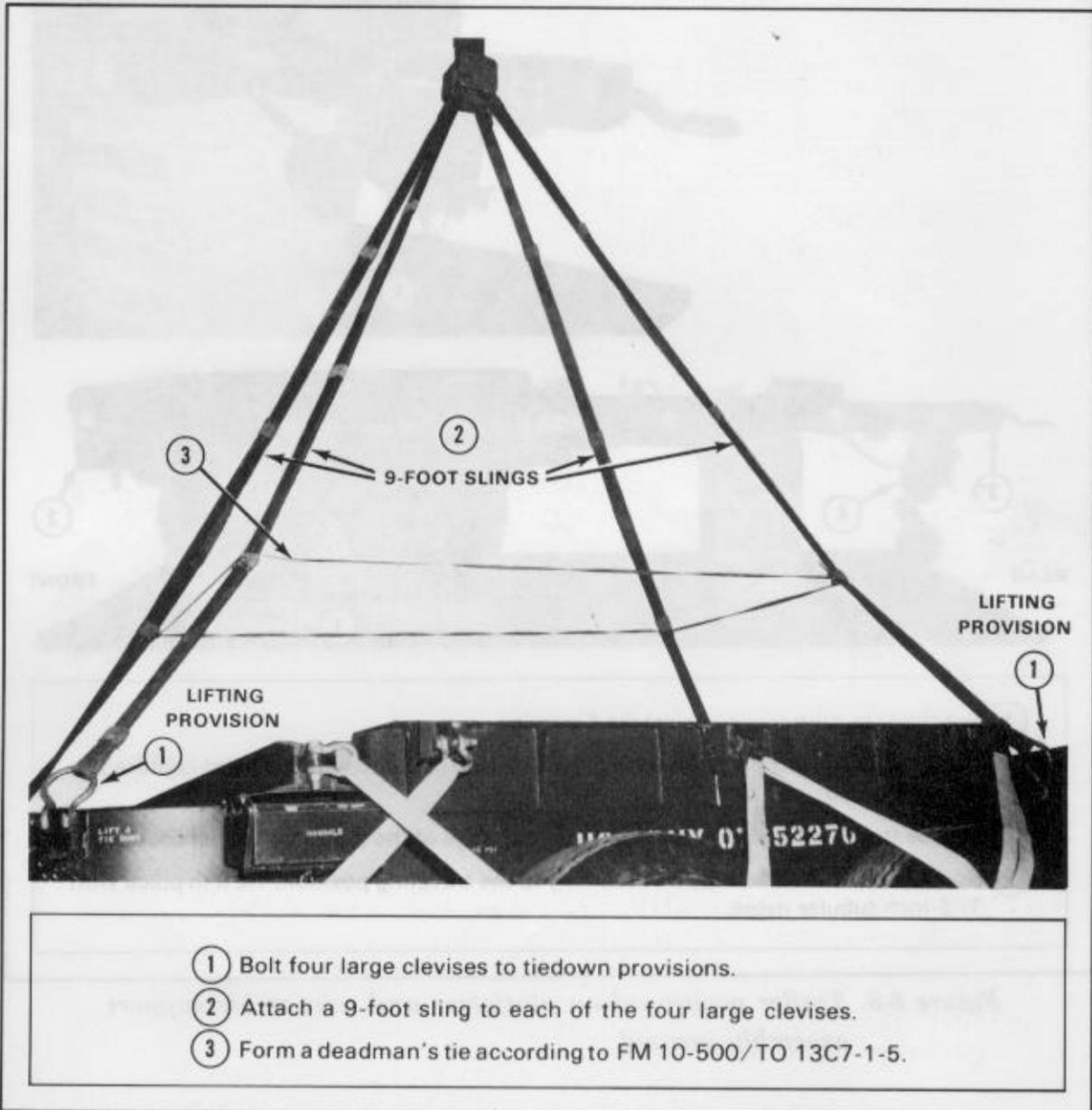
Figure 3-5. Bolsters and spare tire stowed.



*Figure 3-6. Trailer prepared.*

### 3-5. Safetying Suspension Slings

Raise the suspension slings to their highest point and safety them with a deadman's tie according to FM 10-500/TO 13C7-1-5 and figure 3-7.



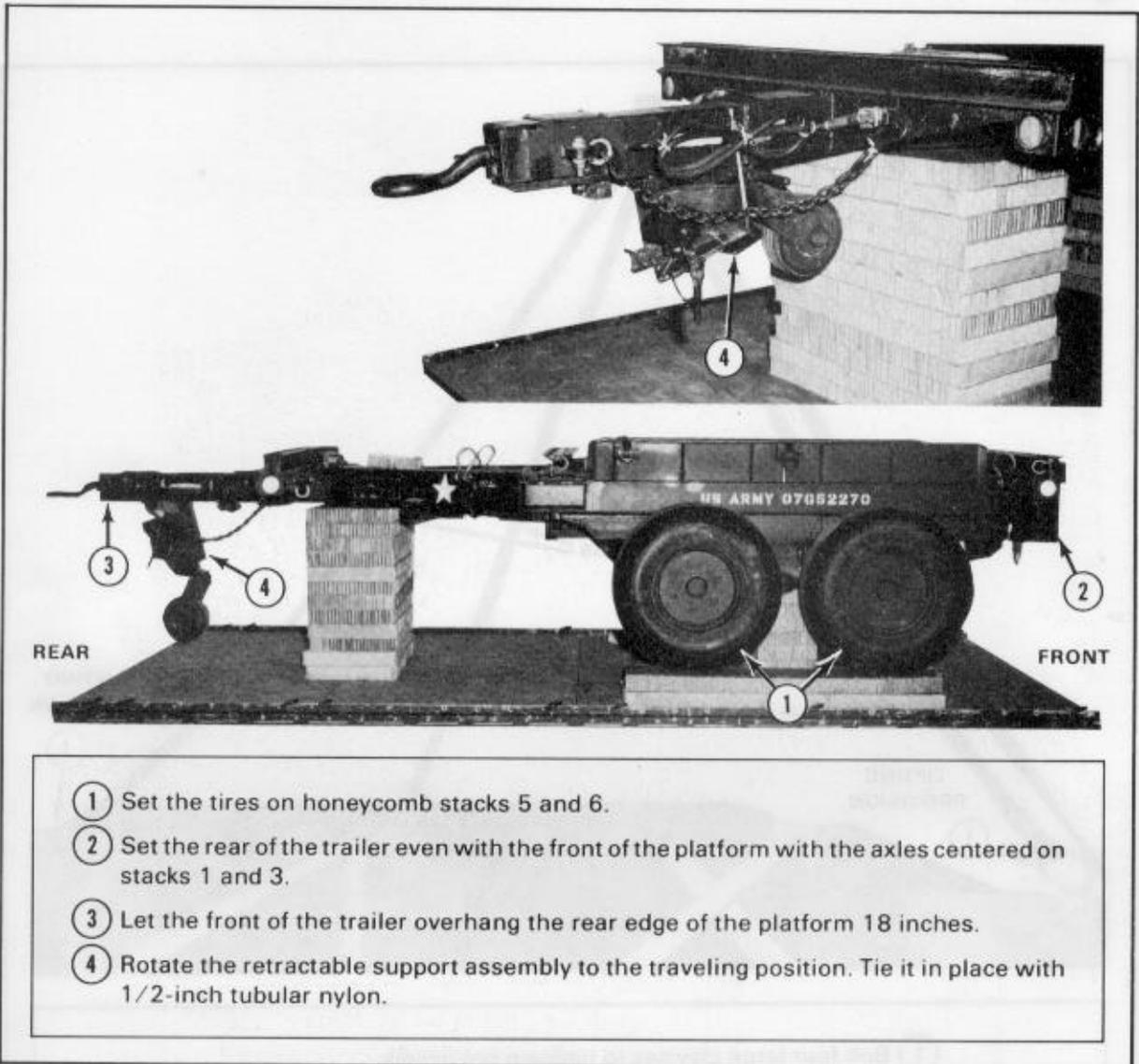
- ① Bolt four large clevises to tiedown provisions.
- ② Attach a 9-foot sling to each of the four large clevises.
- ③ Form a deadman's tie according to FM 10-500/TO 13C7-1-5.

Figure 3-7. Suspension slings and deadman's tie installed.

### 3-6. Positioning Trailer

Use four 9-foot slings to lift the trailer into position. Set the trailer on the honeycomb,

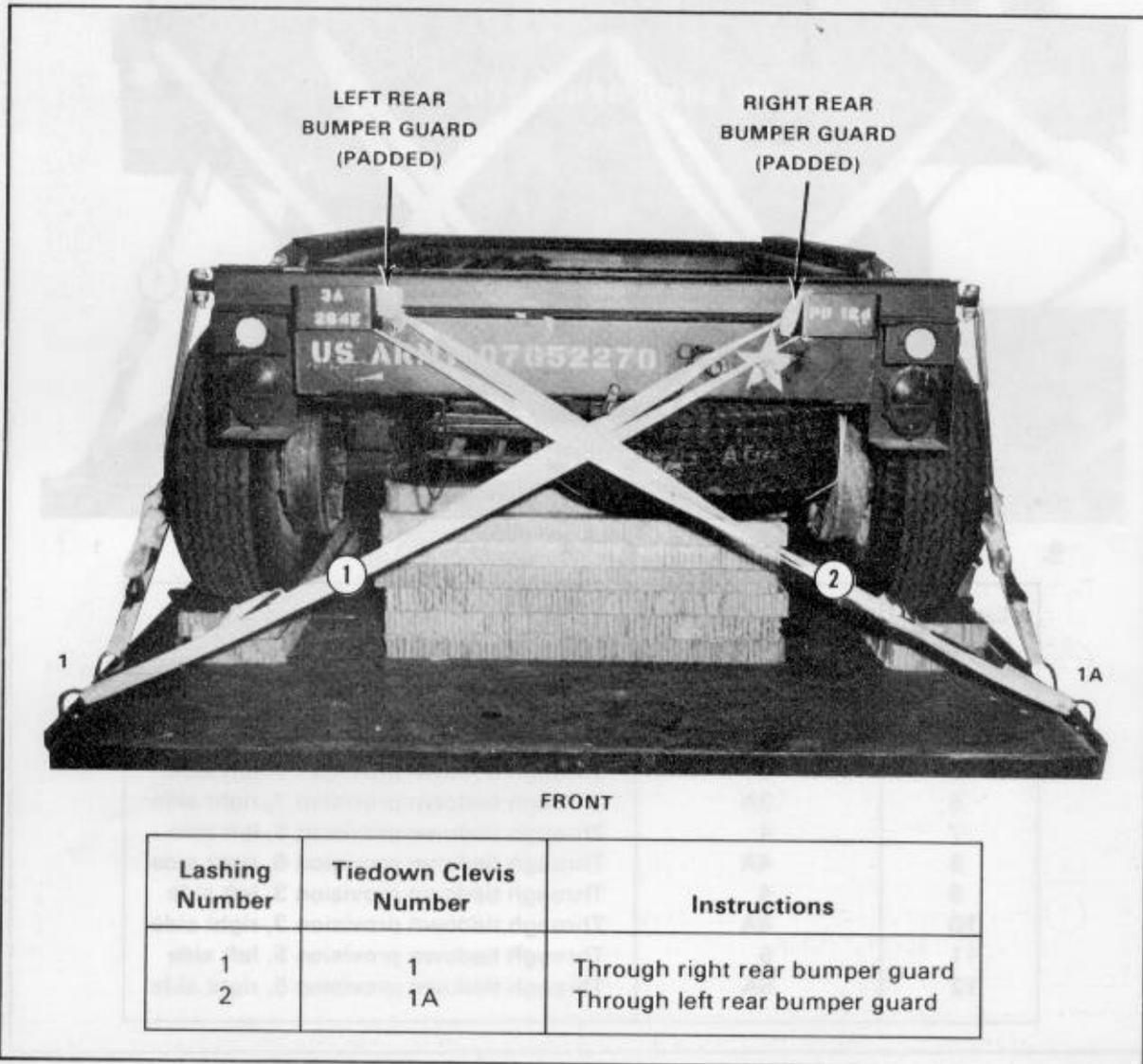
and prepare the retractable support assembly as shown in figure 3-8.



*Figure 3-8. Trailer positioned on platform and retractable support assembly secured.*

**3-7. Lashing Trailer**

Lash the trailer to the platform with twenty 15-foot tiedown assemblies as shown in figures 3-9, 3-10, and 3-11 and as outlined in FM 10-500/TO 13C7-1-5.



*Figure 3-9. Lashings 1 and 2 installed.*

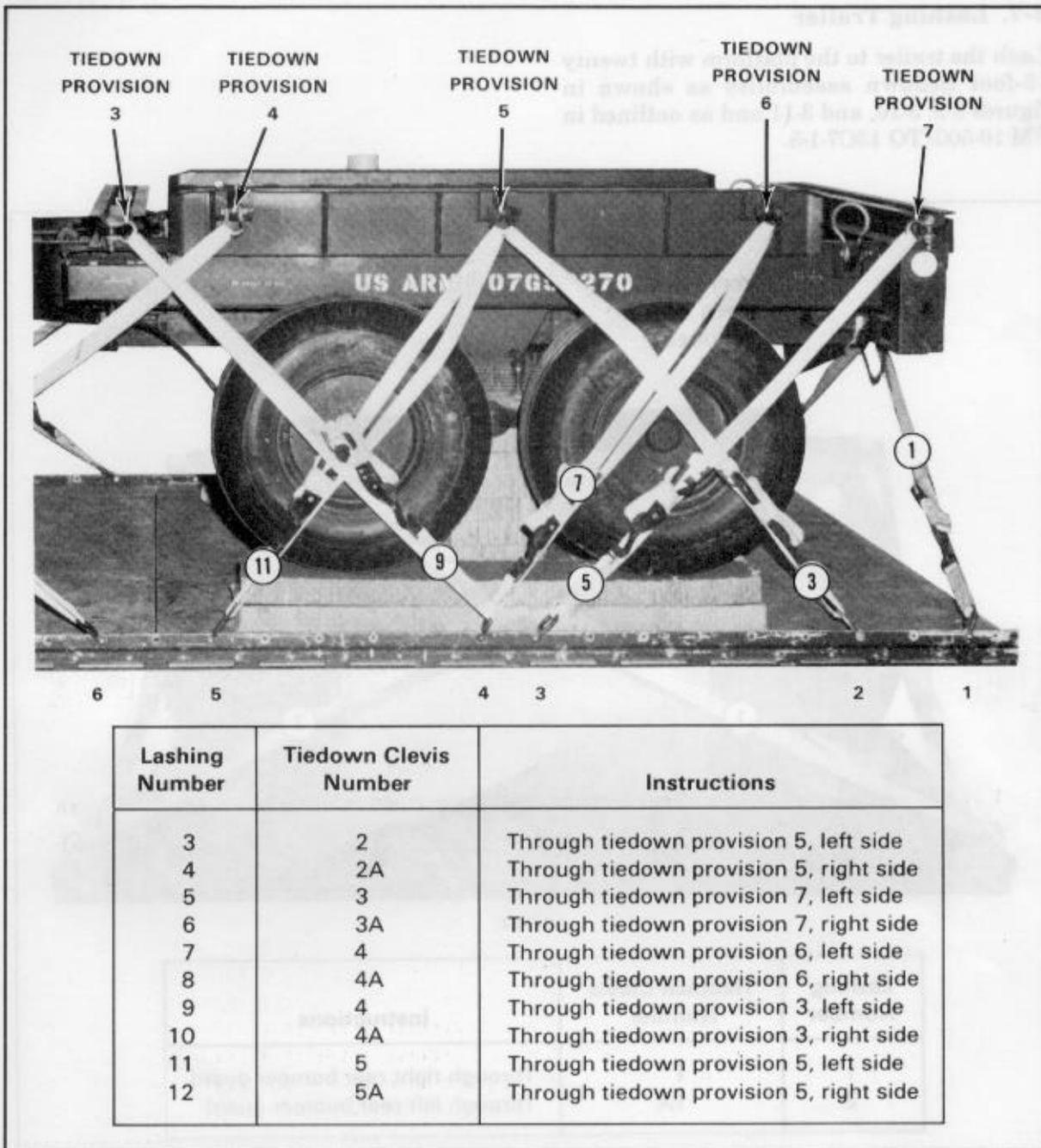


Figure 3-10. Lashings 3 through 12 installed.

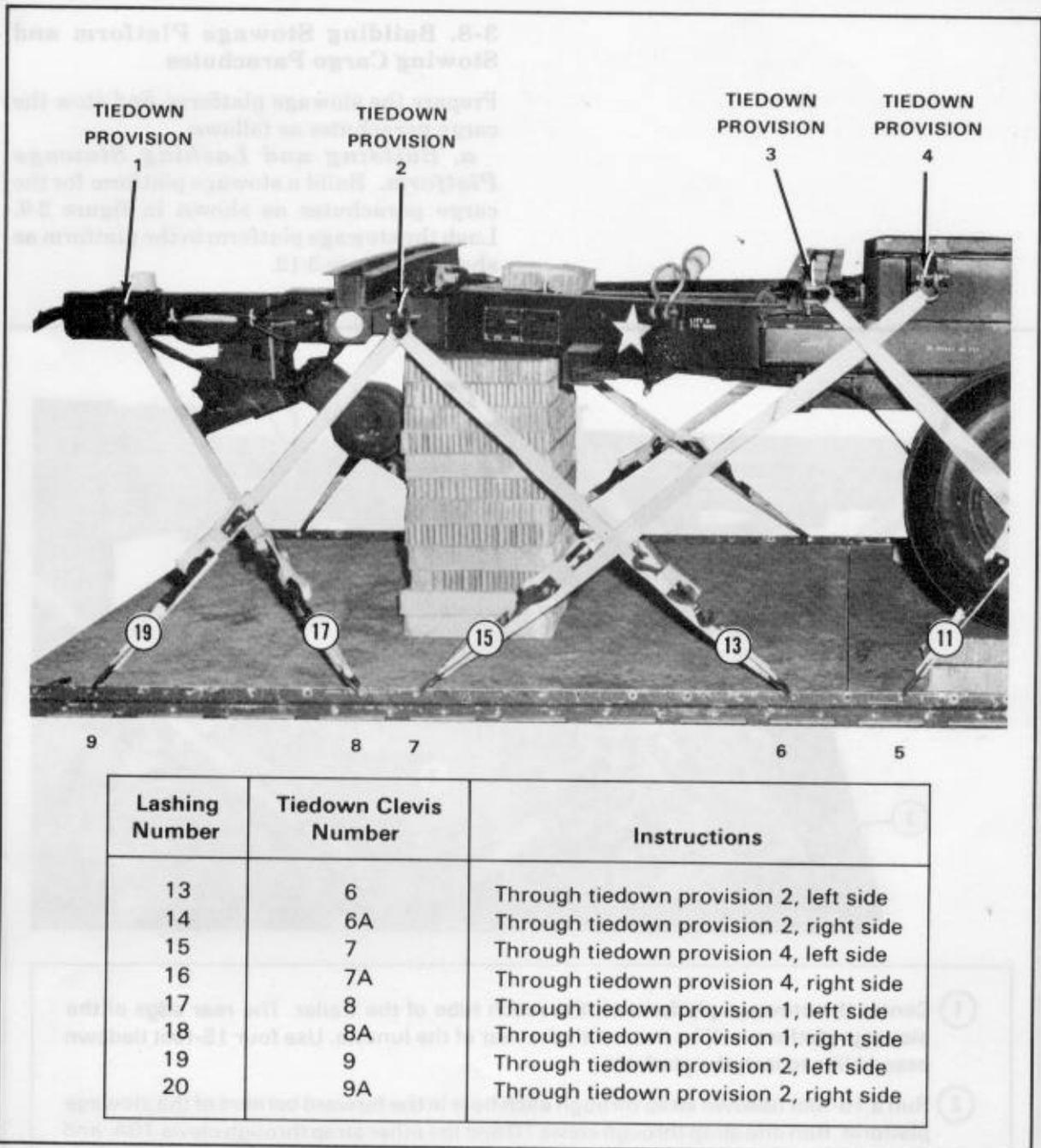
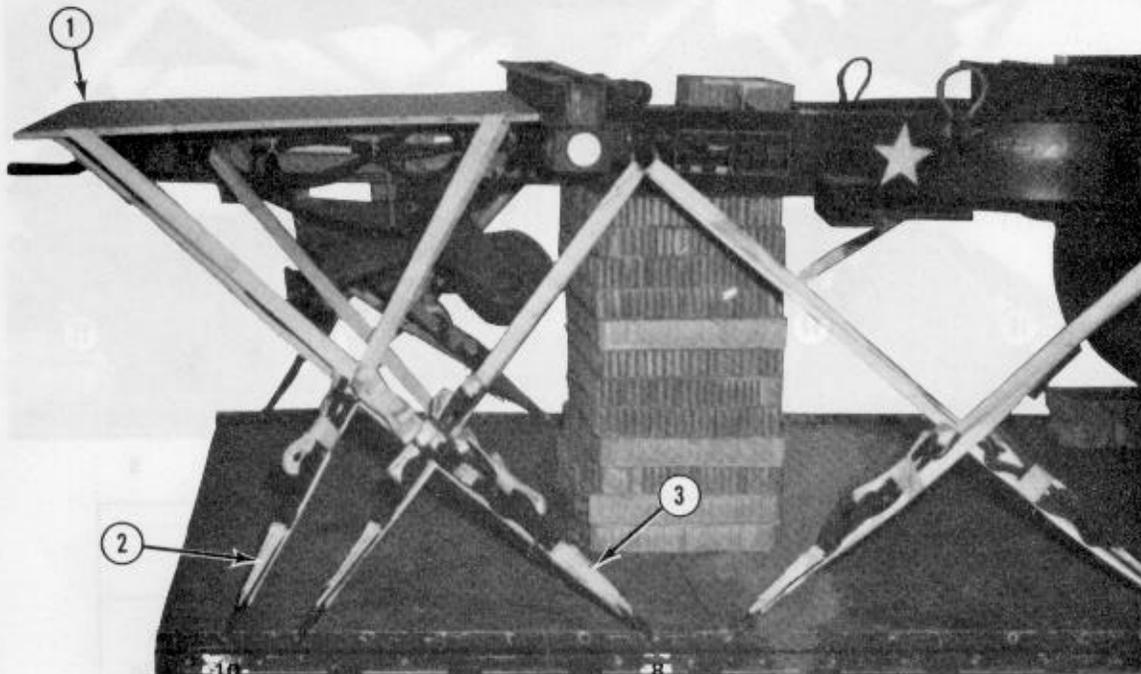


Figure 3-11. Lashings 13 through 20 installed.

### 3-8. Building Stowage Platform and Stowing Cargo Parachutes

Prepare the stowage platform, and stow the cargo parachutes as follows:

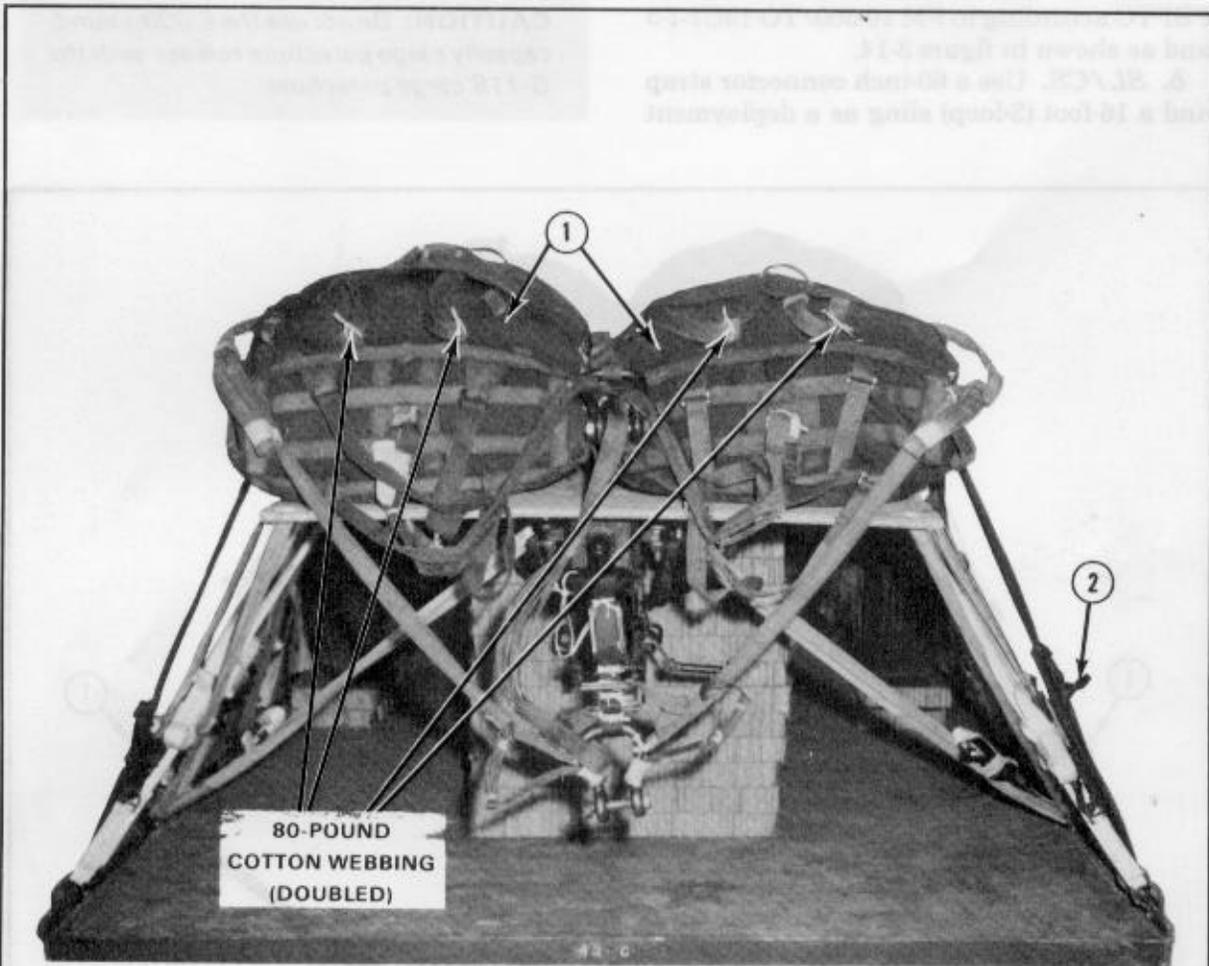
*a. Building and Lashing Stowage Platform.* Build a stowage platform for the cargo parachutes as shown in figure 2-9. Lash the stowage platform to the platform as shown in figure 3-12.



- ① Center the stowage platform on the reach tube of the trailer. The rear edge of the stowage platform will be even with the rear of the lunette. Use four 15-foot tiedown assemblies to lash the platform.
- ② Run a 15-foot tiedown strap through each hole in the forward corners of the stowage platform. Run one strap through clevis 10 and the other strap through clevis 10A, and secure each with a D-ring and load binder.
- ③ Run a 15-foot tiedown strap through each hole in the rear corners of a stowage platform. Run one of the rear straps through clevis 8 and the other through clevis 8A, and secure each with a D-ring and load binder.

*Figure 3-12. Stowage platform lashed to platform.*

**b. Stowing Cargo Parachutes.** Prepare two G-11A or G-11B cargo parachutes as outlined in FM 10-500/TO 13C7-1-5, and stow them as shown in figure 3-13.



- ① Prepare two G-11A or G-11B cargo parachutes as outlined in FM 10-500/TO 13C7-1-5, and place them side by side on the stowage platform.
- ② Install a 6-yard length of type VIII nylon webbing as a parachute restraint strap as outlined in FM 10-500/TO 13C7-1-5. Tie the ends of the strap to tiedown clevises 9 and 9A.

Figure 3-13. Cargo parachutes stowed.

### 3-9. Installing Extraction System

One of two extraction systems may be used on this load. They are the PEFTC and the SL/CS extraction systems. Instructions for installing both systems are given in this manual. However, only the PEFTC is shown.

**a. PEFTC.** Install the components of the PEFTC according to FM 10-500/TO 13C7-1-5 and as shown in figure 3-14.

**b. SL/CS.** Use a 60-inch connector strap and a 16-foot (2-loop) sling as a deployment

line, and install the components of the SL/CS according to FM 10-500/TO 13C7-1-5.

### 3-10. Installing Release Assemblies

**CAUTION:** Do not use the 5,000-pound-capacity cargo parachute release with the G-11B cargo parachute.

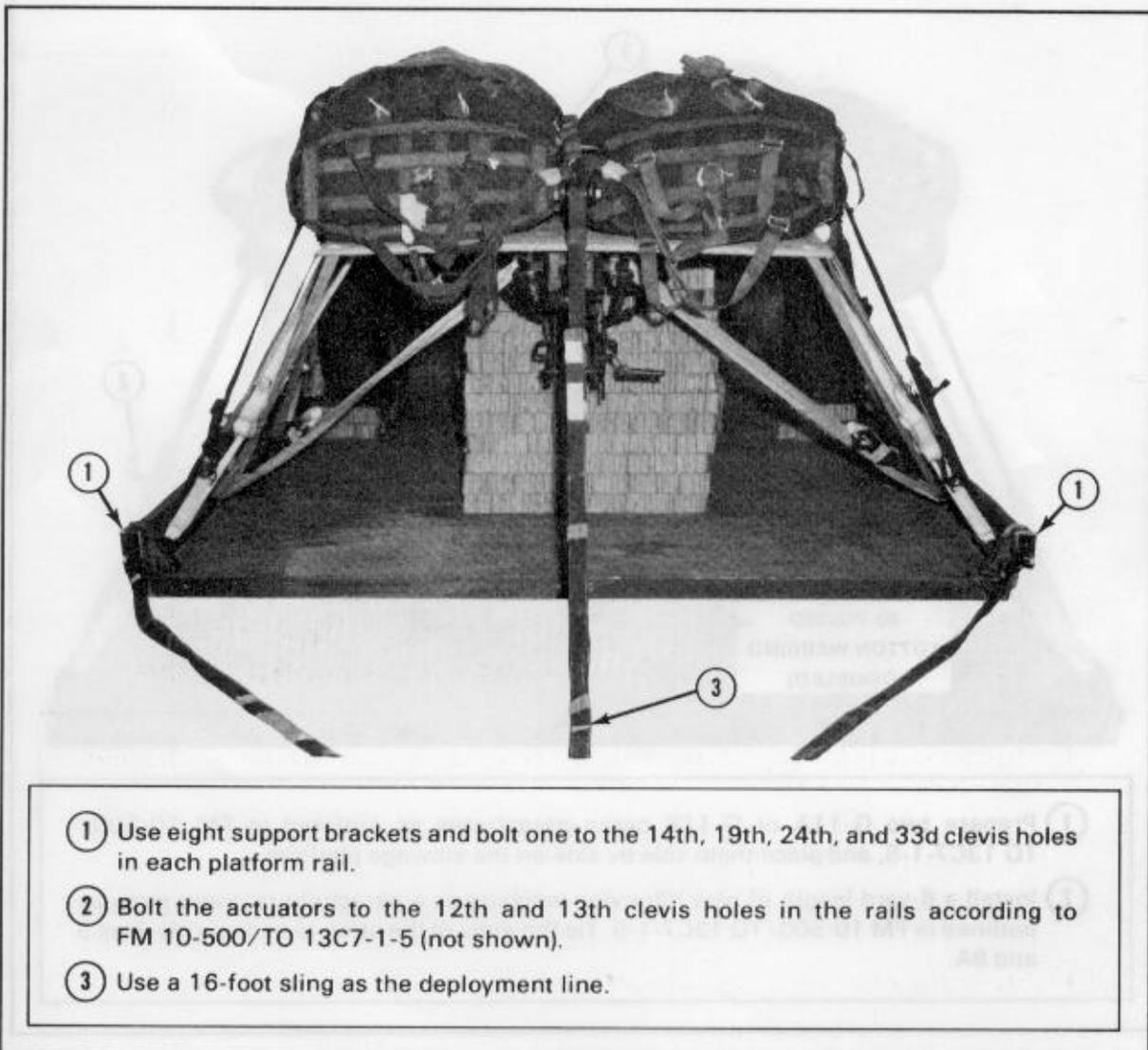


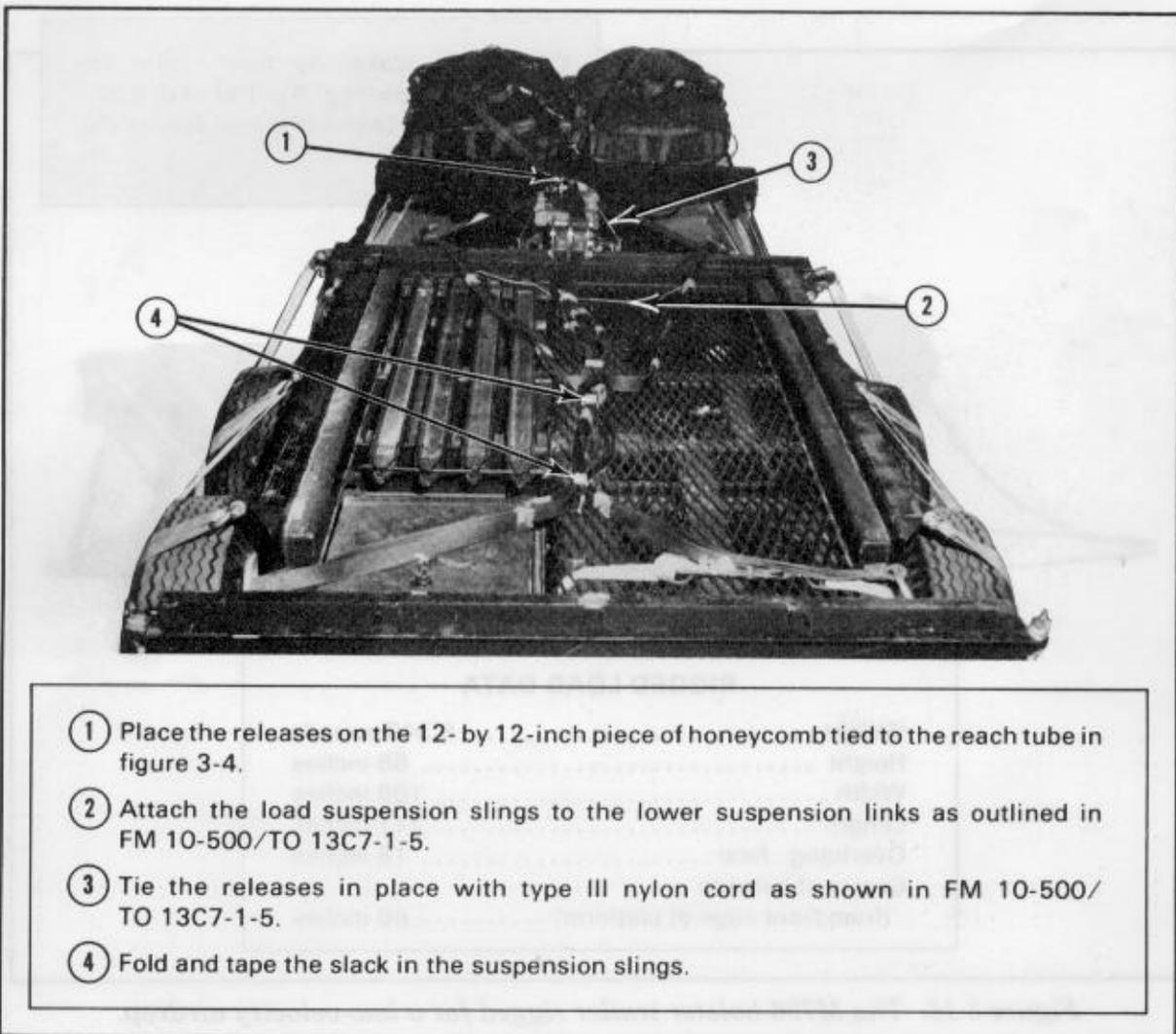
Figure 3-14. PEFTC installed.

Prepare and attach either the M-1 parachute release or two 5,000-pound-capacity cargo parachute releases according to FM 10-500/TO 13C7-1-5 and figure 3-15.

### 3-11. Placing Extraction Parachute

Directions for placing the extraction parachute are given below.

*a. C-130 Aircraft.* Place a 15-foot unreefed cargo extraction parachute on the load for installation in the aircraft.



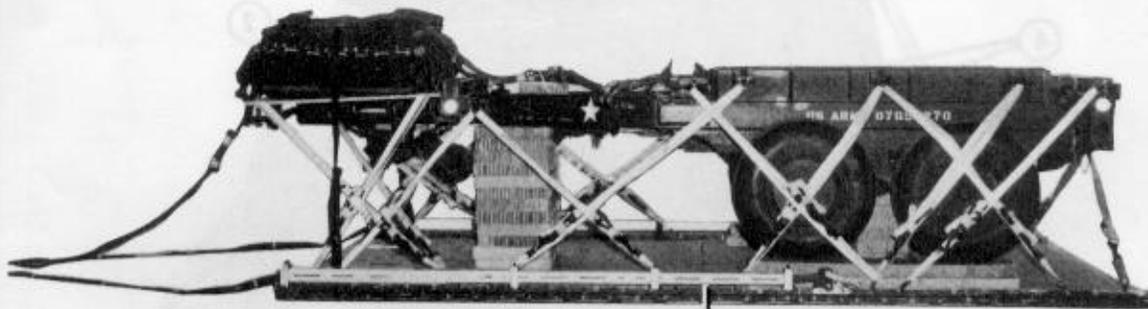
*Figure 3-15. Releases installed.*

**b. C-141 Aircraft.** Place a 15-foot cargo extraction parachute (either reefed or unreefed) on the load for installation in the aircraft. The parachute needs a continuous 160-foot, 1-loop, type XXVI, nylon webbing extraction line. The extraction line is connected to the 36-inch adapter web of the parachute with a type IV link assembly.

**3-12. Marking Rigged Load**

Mark the rigged load as outlined in FM 10-500/TO 13C7-1-5 and as shown in figure 3-16. If there is an accompanying load,

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



**RIGGED LOAD DATA**

Weight .....	6,340 pounds
Height .....	65 inches
Width .....	108 inches
Length .....	211 inches
Overhang: Rear .....	18 inches
Center of balance (from front edge of platform) .....	80 inches

Figure 3-16. The M796 bolster trailer rigged for a low-velocity airdrop.

the weight, center of balance, and parachute requirements must be computed.

**3-13. Equipment Required**

The equipment needed to prepare and rig the M796 bolster trailer for a low-velocity airdrop is listed in table 3-1. When an accompanying load is included, the equipment required may vary.

*Table 3-1. Equipment required for rigging the M796 bolster trailer for low-velocity airdrop*

National Stock Number	Item	Quantity
1670-00-040-8215	Adapter web, 36-in (for 15-ft parachute)	1
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1377-00-958-1048	Cartridge, time-delay, 20-second (Use w 5,000-lb release.)	2
4030-00-090-5354	Clevis assembly, suspension, large	4
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-168-6068	*Coupling, extraction force transfer (platform)	1
1670-00-360-0328	Cover, clevis, large	2
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
	Line, extraction:	
1670-00-856-0265	60-ft (1-loop), type X, nylon webbing (for C-130) <u>OR</u>	1
1670-01-064-4452	60-ft (1-loop), type XXVI, nylon webbing (for C-130)	1
1670-01-107-7652	160-ft (1-loop), type XXVI, nylon webbing (for C-141)	1
1670-00-783-5988	Link assembly, type IV (15-ft parachute)	1
1670-00-799-8596	Load coupler, 8-spool (Use w 5,000-lb release.)	1
5510-00-220-6148	Lumber:	
	2- by 6- by 40-in	2
	2- by 6- by 54-in	4
5315-00-010-4661	Nail, steel wire, common, 10d	As required

Table 3-1. Continued.

National Stock Number	Item	Quantity
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in: 6- by 48-in 12- by 12-in 12- by 48-in 12- by 60-in 18- by 36-in 36- by 96-in	7 sheets (2) (1) (19) (4) (12) (2)
1670-00-269-1107 1670-01-016-7841 1670-00-052-1548	Parachute: Cargo, 100-ft, G-11A <u>OR</u> Cargo, 100-ft, G-11B Cargo, extraction, 15-ft	2 2 1
1670-00-893-1631 1670-00-893-1624 1670-00-893-1627 5320-00-893-1632	Platform, air delivery, modular, 16-ft: Clevis, load tiedown Panel Rail, platform, side, 6-ft Rivet, blind-drive type, 1/4-in diameter	20 4 2 64
5530-00-128-4981	Plywood, 3/4- by 48- by 60-in	1
1670-01-097-8816	Release, cargo parachute, M-1 (If not available, use two releases, cargo parachute, 5,000-lb-capacity, NSN 1377-00-799-8494.)	1
1670-00-753-3788 1670-01-062-6301  1670-01-063-7761  1670-00-753-3631 1670-01-062-6304  1670-00-753-3794 1670-01-062-6302	Sling, cargo, airdrop: For 5,000-lb-capacity releases: 3-ft (3-loop), type X <u>OR</u> 3-ft (2-loop), type XXVI For deployment line: 16-ft (2-loop), type XXVI For lifting load: 9-ft (3-loop), type X <u>OR</u> 9-ft (2-loop), type XXVI For riser extension: 20-ft (2-loop); type X <u>OR</u> 20-ft (2-loop), type XXVI	2 2  1  4 4  2 2
1670-00-040-8219	Strap, parachute release, multicut	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	25
8305-00-268-2411 8305-00-263-3591 8305-00-082-5752	Webbing: Cotton, 80-lb Nylon, type VIII (restraint strap) Nylon, tubular, 1/2-in	As required 6 yd As required

Table 3-1. Continued.

National Stock Number	Item	Quantity
*When this item is not used, the following items are needed for the SL/CS:		
1670-00-090-5354	Clevis assembly, suspension, large	1
1670-00-783-5988	Link assembly, type IV	1
1670-00-753-3790	Sling, cargo, 9-ft (2-loop), type X <u>OR</u>	2
1670-01-062-6304	Sling, cargo, 9-ft (2-loop), type XXVI	2
1670-00-998-0117	Static line, cargo parachute, breakaway-type, with release knife and clevis	2
1670-00-738-5878	Strap, connector, 60-in	1

## GLOSSARY

<b>ACB</b>	attitude control bar
<b>AFR</b>	Air Force regulation
<b>AFTO</b>	Air Force technical order
<b>CB</b>	center of balance
<b>d</b>	penny
<b>DA</b>	Department of the Army
<b>FM</b>	field manual
<b>ft</b>	foot/feet
<b>gal</b>	gallon
<b>in</b>	inches
<b>LAPE</b>	low-altitude parachute-extraction
<b>LAPES</b>	low-altitude parachute-extraction system
<b>lb</b>	pound
<b>no</b>	number
<b>NSN</b>	national stock number
<b>PEFTC</b>	extraction force transfer coupling (platform)
<b>SL/CS</b>	static line/connector strap
<b>TM</b>	technical manual
<b>TO</b>	technical order
<b>US</b>	United States
<b>w</b>	with
<b>yd</b>	yard

## REFERENCES

- |  |  |
|--|--|
| <b>AFR 71-4/TM 38-250</b>                        | Packaging and Materials Handling: Preparation of Hazardous Materials for Military Air Shipment   |
| <b>FM 10-500/TO 13C7-1-5</b>                     | Airdrop of Supplies and Equipment: Rigging Airdrop Platforms   |
| <b>FM 10-553/TO 13C7-18-41</b>                   | Airdrop of Supplies and Equipment: Rigging Ammunition  |
| <b>TM 9-2330-287-14&amp;P</b>                    | Operator's, Organizational, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Trailer, Bolster: 4-Ton, 4-Wheel, General Purpose, M796 (NSN 2330-00-089-3866) |
| <b>TM 10-1670-208-20&amp;P/<br/>TO 13C3-4-12</b> | Organizational Maintenance Manual Including Repair Parts and Special Tools List for Platforms, Type II Modular and LAPES/Airdrop Modular   |