

CHAPTER 5

RIGGING THE M813 OR M54, 5-TON CARGO TRUCK
ON A TYPE V PLATFORM

Section I

RIGGING TRUCK FOR LOW-VELOCITY AIRDROP

5-1. Description of Load

The M813 or M54, 5-ton cargo truck is rigged on a 24-foot, type V airdrop platform with six G-11B cargo parachutes and other items of airdrop equipment. The weight and dimensions of the truck are given in Chapter 4, Table 4-1. This truck may be delivered by low-velocity airdrop from

C-130 or C-141 aircraft. The M813 truck is shown throughout this chapter. Figure 5-1 shows the unrigged M813 truck. The truck you are rigging may vary slightly from the one shown, depending on the make and model. Adapt these procedures as necessary to rig your truck.

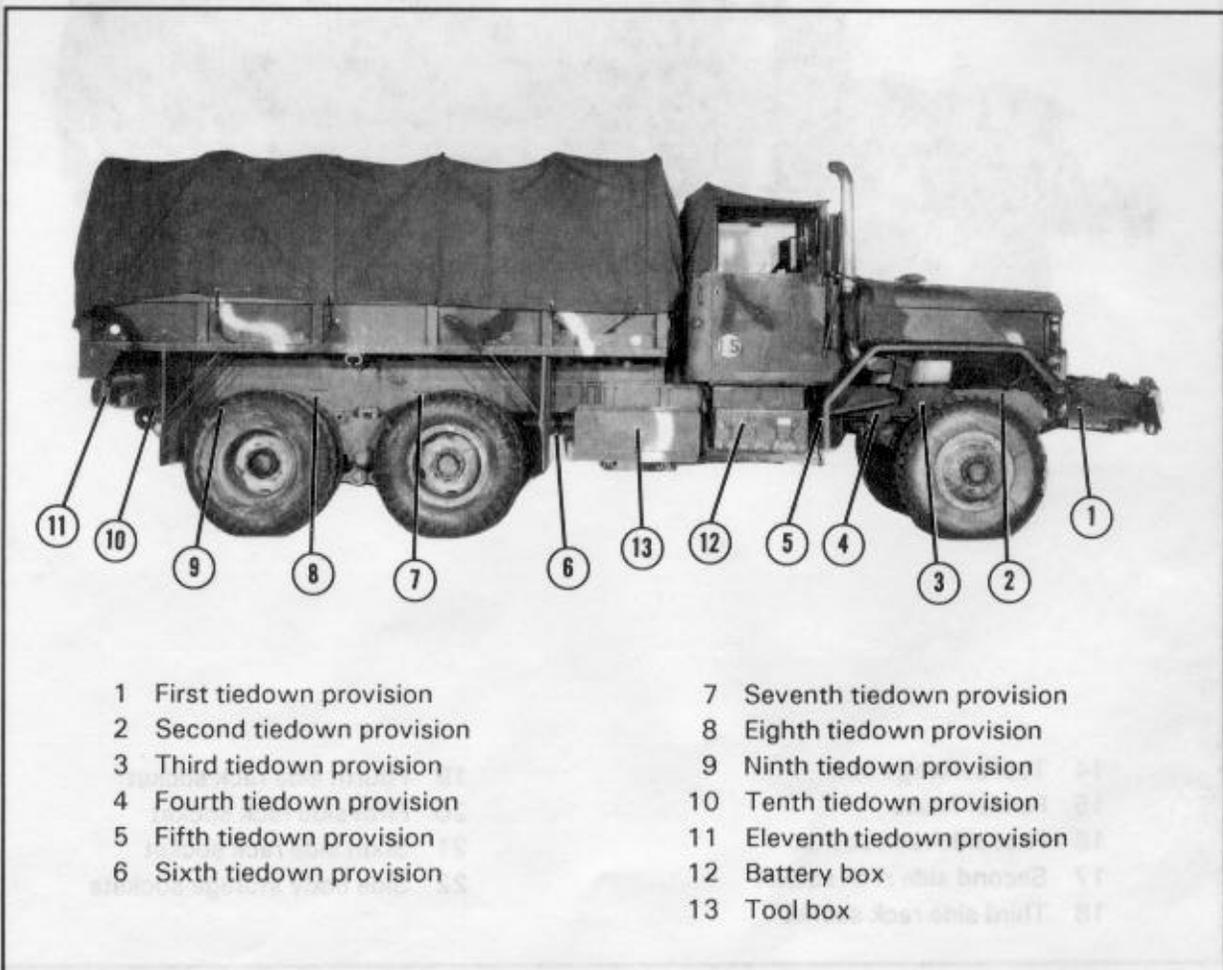
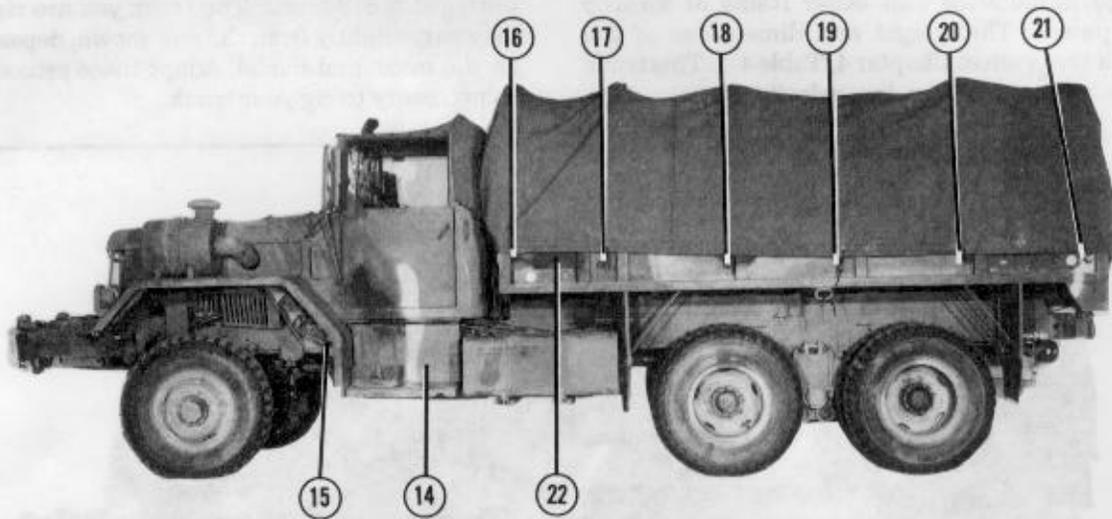


Figure 5-1. Unrigged M813, 5-ton cargo truck



- | | | | |
|----|-------------------------|----|---------------------------|
| 14 | Tool stowage box | 19 | Fourth side rack socket |
| 15 | Fender brace | 20 | Fifth side rack socket |
| 16 | First side rack socket | 21 | Sixth side rack socket |
| 17 | Second side rack socket | 22 | Side body storage sockets |
| 18 | Third side rack socket | | |

Figure 5-1. Unrigged M813, 5-ton cargo truck (continued)

5-2. Preparing Platform

Prepare a 24-foot, type V airdrop platform as described below.

a. Inspecting Platform. Inspect, or assemble and inspect, the platform according to TM 10-1670-268-20&P/TO 13C7-52-22.

Note:

If the platform must be assembled, install the suspension links when assembling the platform. See Figure 5-2 for the location of the suspension links.

b. Installing Suspension Links. Install the suspension links as described in Figure 5-2.

c. Installing Tandem Links. Install a tandem link on the front of each rail as shown in Figure 5-3.

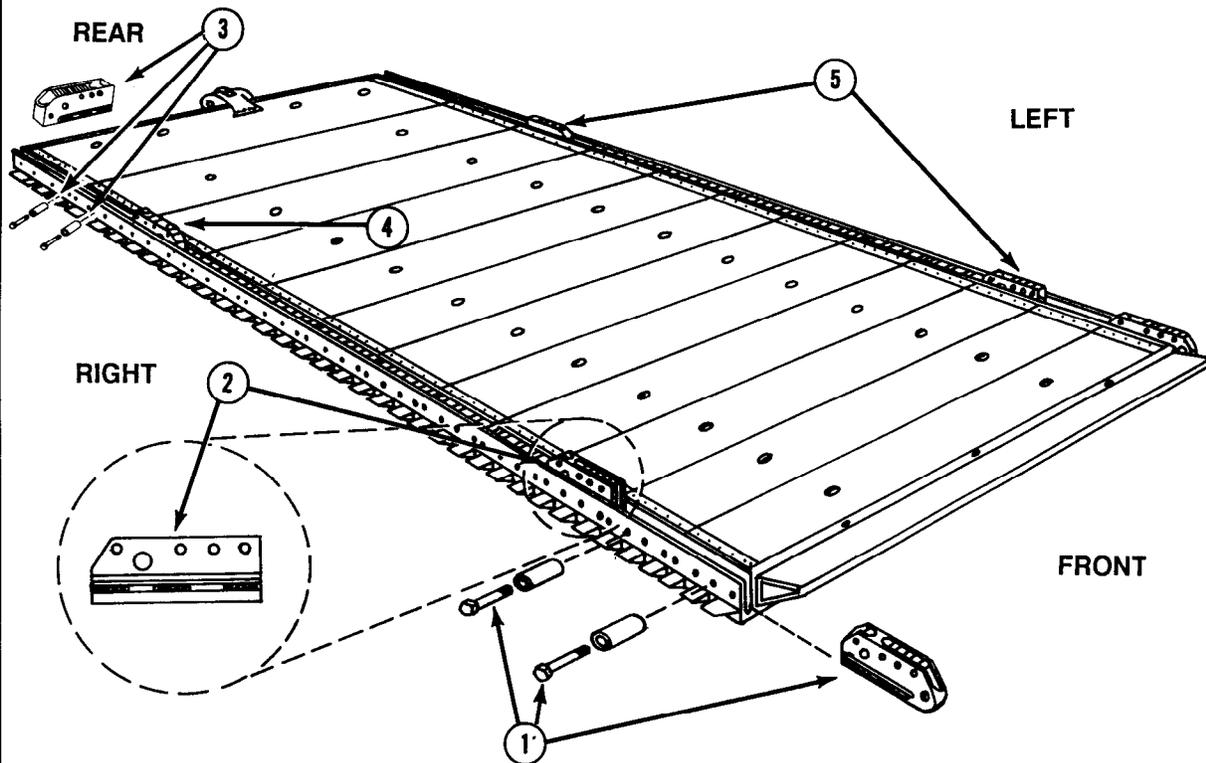
d. Attaching and Numbering Clevises. Attach and number 36 clevises as shown in Figure 5-3.

e. Labeling and Numbering Tiedown Rings. Label and number the tiedown rings as shown in Figure 5-3.

Notes:

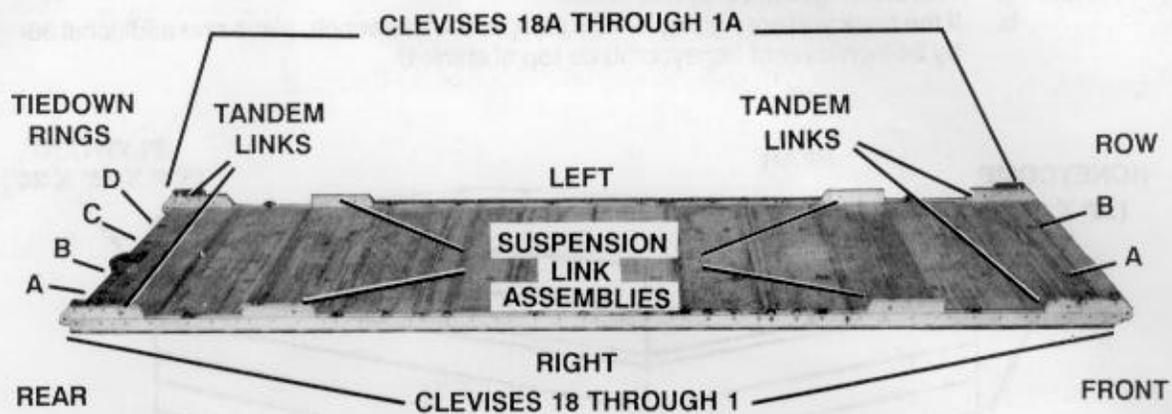
- a. The nose bumper may or may not be installed.*
- b. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.*

Note: This drawing is not drawn to scale.



- ① Remove any bushings, bolts, and tandem links that may have been installed in holes 1 through 11 on the right rail.
- ② Place a suspension link in the front of the right rail with the flat portion to the front of the rail. Slide the link along the rail until the holes in the link align with rail holes 9, 10, and 11. Bolt the link in place with the bushing bolts.
- ③ Remove any bushings, bolts, and tandem links that may have been installed in holes 38 through 48 on the right rail.
- ④ Place a suspension link on the rear of the right rail with the flat portion to the rear of the rail. Slide the link along the rail until the holes in the link align with rail holes 38, 39, and 40. Bolt the link in place with the bushing bolts.
- ⑤ Install two suspension links on the left rail, adapting the procedures in steps 1 through 4 above.

Figure 5-2. Suspension links installed



Step:

1. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
2. Install a clevis on bushings 1 and 3 of each front tandem link.
3. Install a tandem link on the rear of each platform side rail using holes 46, 47, and 48.
4. Install a clevis on bushings 2, 3, and 4 of each rear tandem link.
5. Starting at the front of each platform side rail, install cleaves on each platform side rail using the bushings bolted on holes 7, 14, 15, 16, 19, 20, 21, 22, 25, 31, 34, 36, and 43.
6. Starting at the front of the platform, number the cleaves bolted to the right side from 1 through 18 and those bolted to the left side from 1A through 18A.
7. Label the two rows of tiedown rings in the first 11 panels A and B from right to left. Label the four tiedown rings in the last panel A, B, C, and D from right to left. Starting at the front of the platform, number the rows of tiedown rings 1 through 12.

Figure 5-3. Platform prepared

5-3. Building and Positioning Honeycomb Stacks

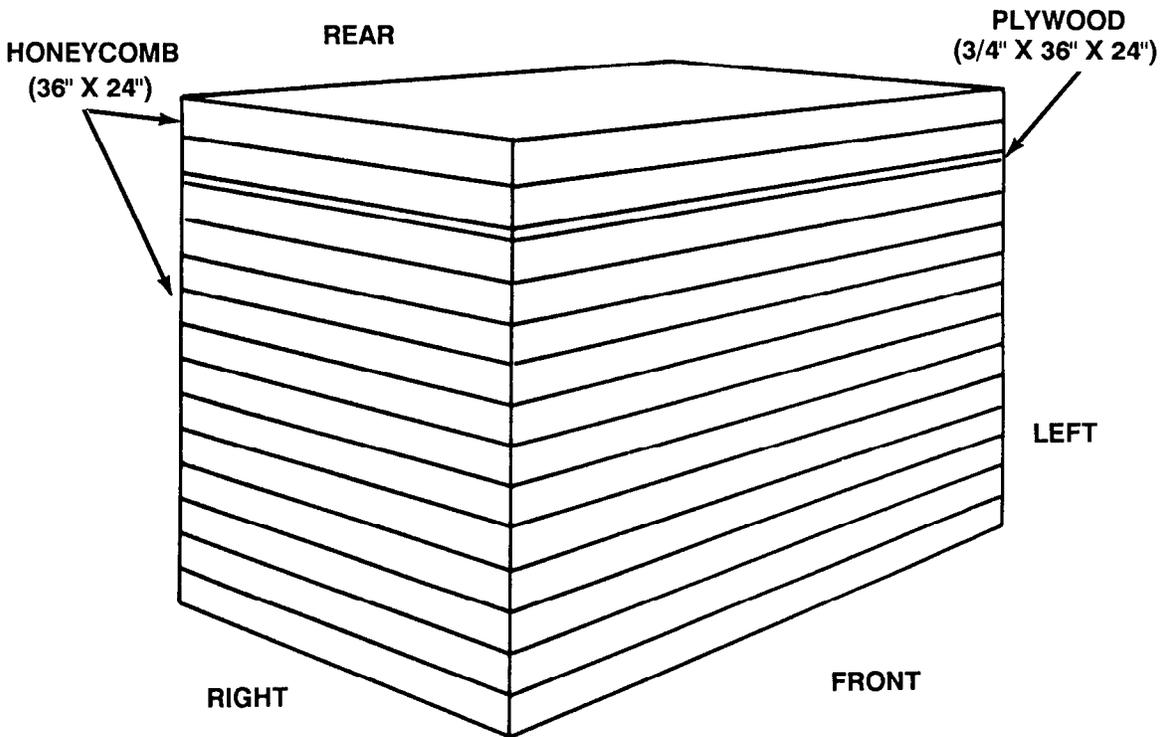
Build and position the honeycomb stacks as described below.

honeycomb together. Do NOT glue the stacks to the platform.

a. Build the honeycomb stacks as shown in Figures 5-4 through 5-11. Glue the layers of the

b. Position the honeycomb stacks on the platform as shown in Figures 5-12 through 5-14.

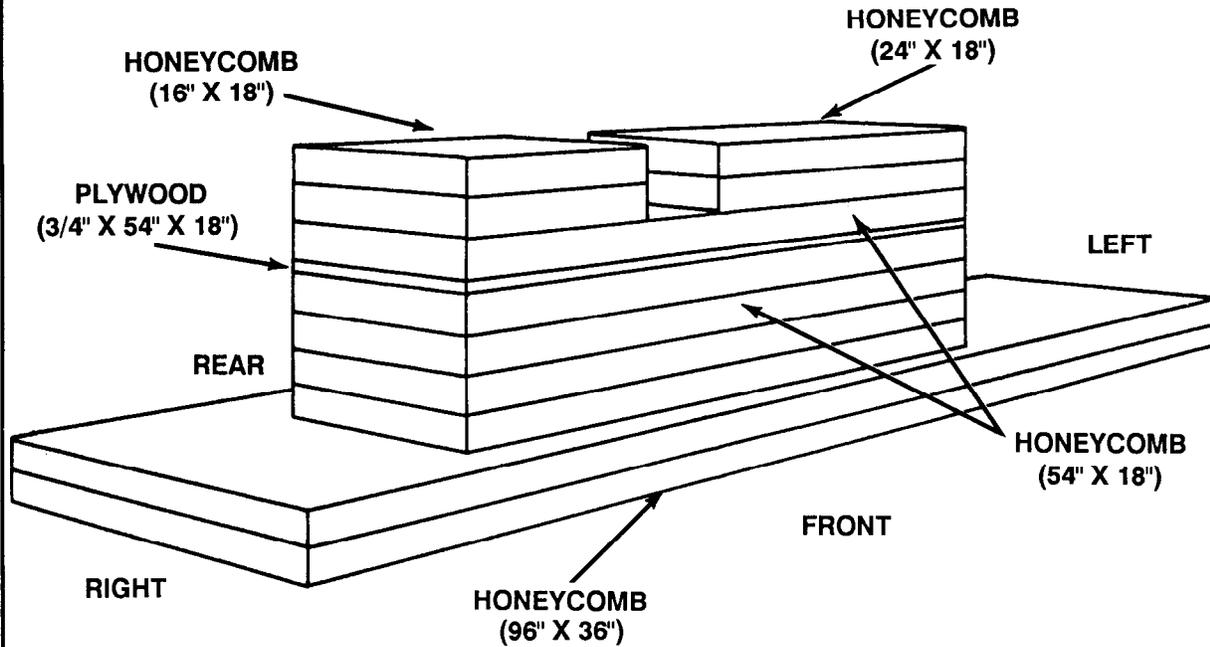
- Notes:** a. This drawing is not drawn to scale.
 b. If the truck you are rigging is NOT equipped with a winch, place one additional 36-by 24-inch layer of honeycomb on top of stack 1.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	11	36	24	Honeycomb	Place honeycomb as the base.
	1	36	24	3/4-inch plywood	Place plywood on top of the base.
	1	36	24	Honeycomb	Place honeycomb on top of the plywood.

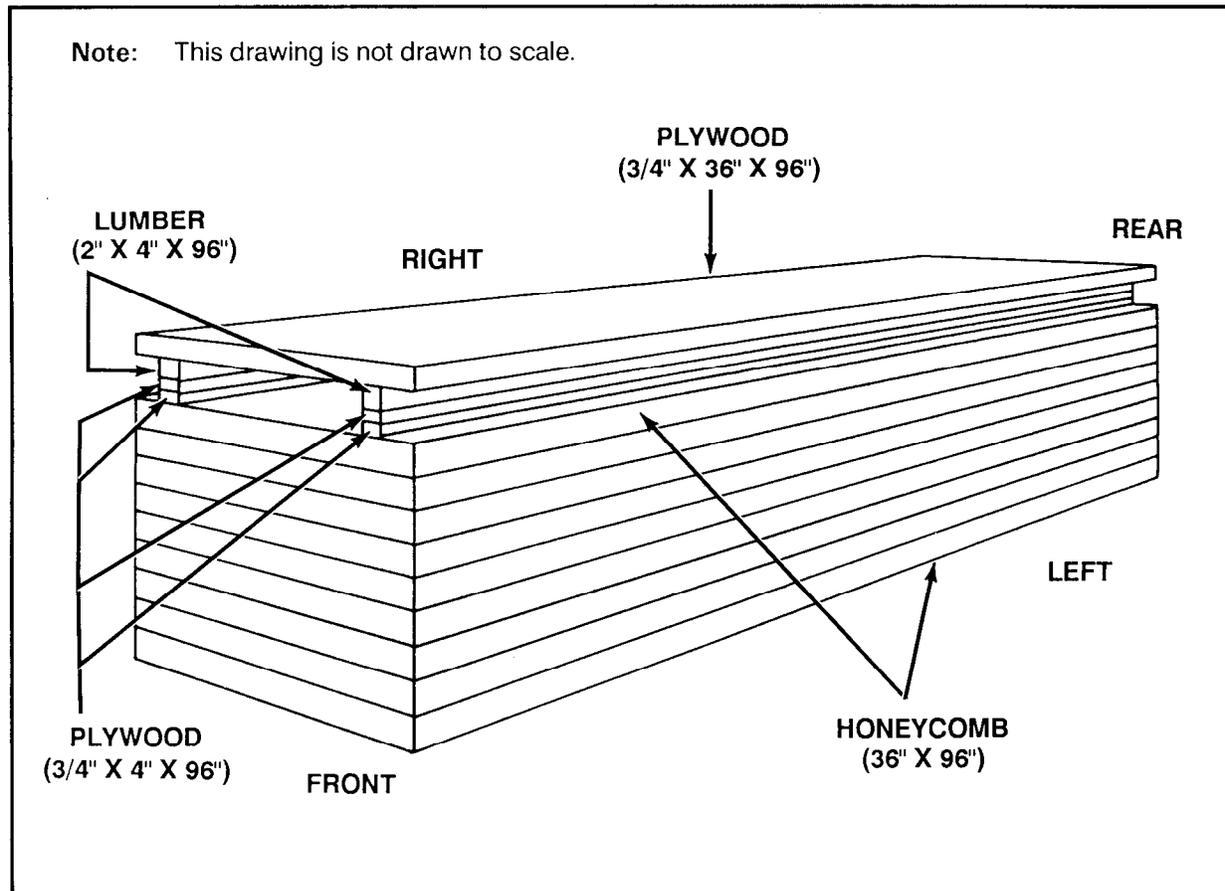
Figure 5-4. Honeycomb stack 1 prepared

Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	1	96	36	Honeycomb	Place honeycomb as the base.
	3	54	18	Honeycomb	Center honeycomb on top of the base.
	1	54	18	3/4-inch plywood	Place plywood on top of the 54- by 18-inch honeycomb.
	1	54	18	Honeycomb	Place honeycomb on top of the plywood.
	2	16	18	Honeycomb	Place honeycomb on top of and flush with the right side of the 54- by 18-inch honeycomb.
	2	24	18	Honeycomb	Place honeycomb on top of and flush with the left side of the 54- by 18-inch honeycomb.

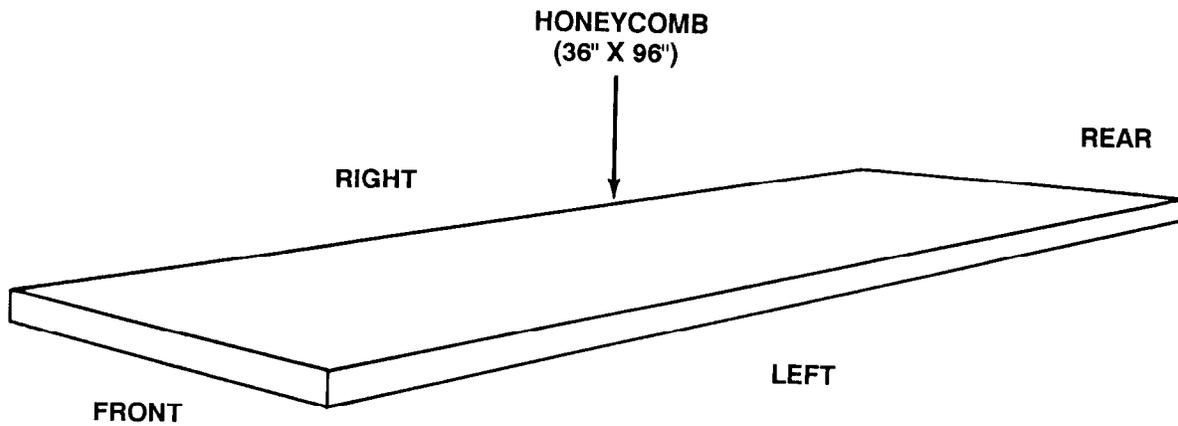
Figure 5-5. Honeycomb stack 2 prepared



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
3	7	36	96	Honeycomb	Place honeycomb as the base.
	2	4	96	3/4-inch plywood	Place plywood on top of the base 8 inches from the right side.
	2	4	96	3/4-inch plywood	Place plywood on top of the base 8 inches from the left side.
	1	4	96	2- by 4-inch lumber	Place lumber on top of the 4- by 96-inch plywood on the right side.
	1	4	96	2- by 4-inch lumber	Place lumber on top of the 4- by 96-inch plywood on the left side.
	1	36	96	3/4-inch plywood	Center plywood on top of the lumber and over the honeycomb base.

Figure 5-6. Honeycomb stack 3 prepared

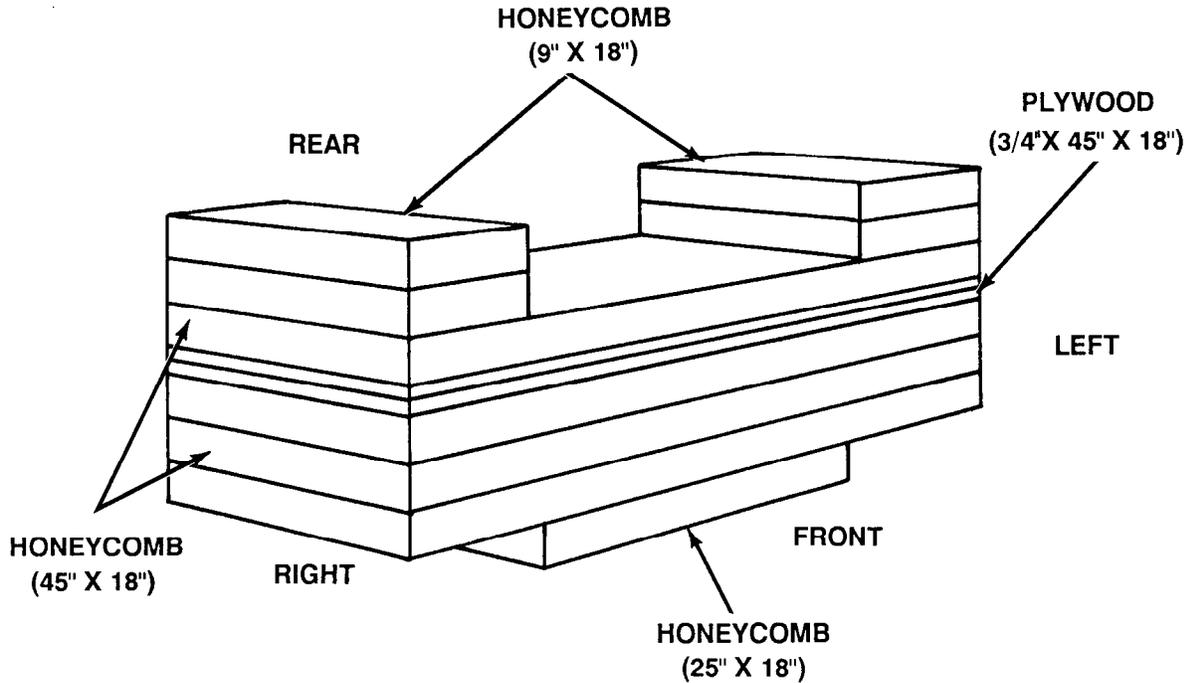
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
4	1	36	96	Honeycomb	Form stack.
5	1	36	96	Honeycomb	Form stack.

Figure 5-7. Honeycomb stacks 4 and 5 prepared

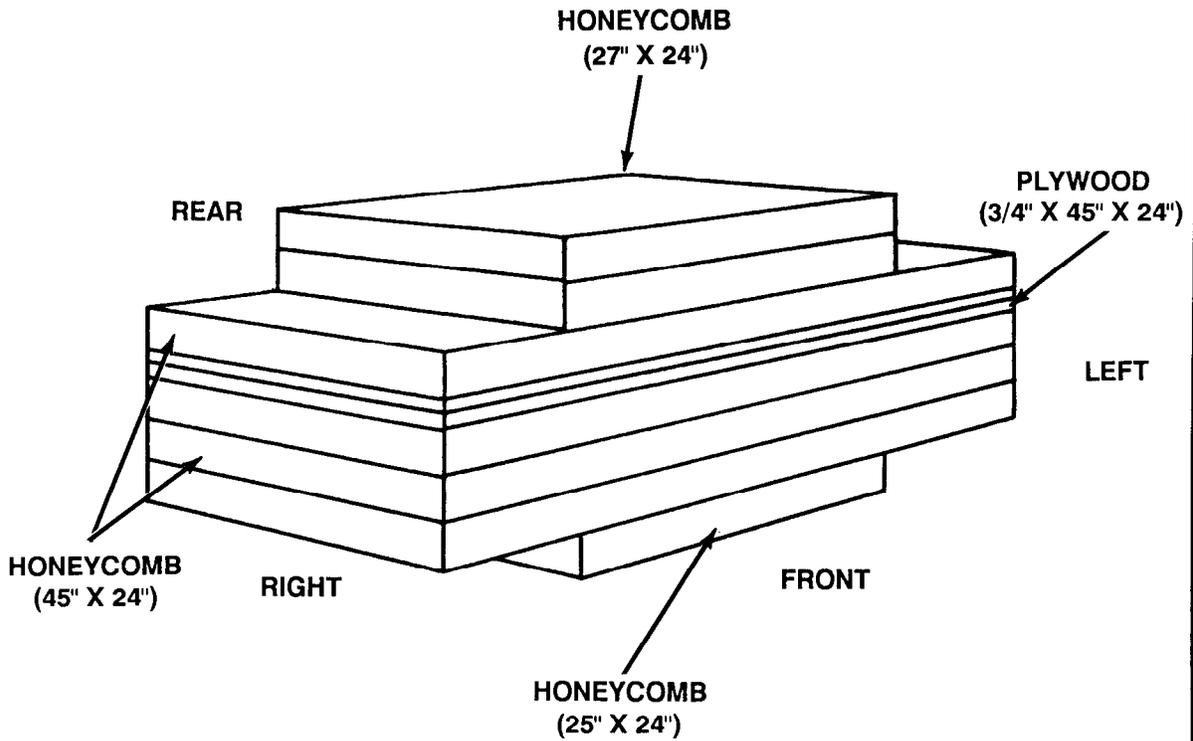
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
6	1	25	18	Honeycomb	Place honeycomb as the base.
	3	45	18	Honeycomb	Center honeycomb on top of the base.
	2	45	18	3/4-inch plywood	Place plywood on top of the 45- by 18-inch honeycomb.
	1	45	18	Honeycomb	Place honeycomb on top of the plywood.
	4	9	18	Honeycomb	Place two pieces of honeycomb on each side of the 45- by 18-inch honeycomb even with the 18-inch edge.

Figure 5-8. Honeycomb stack 6 prepared

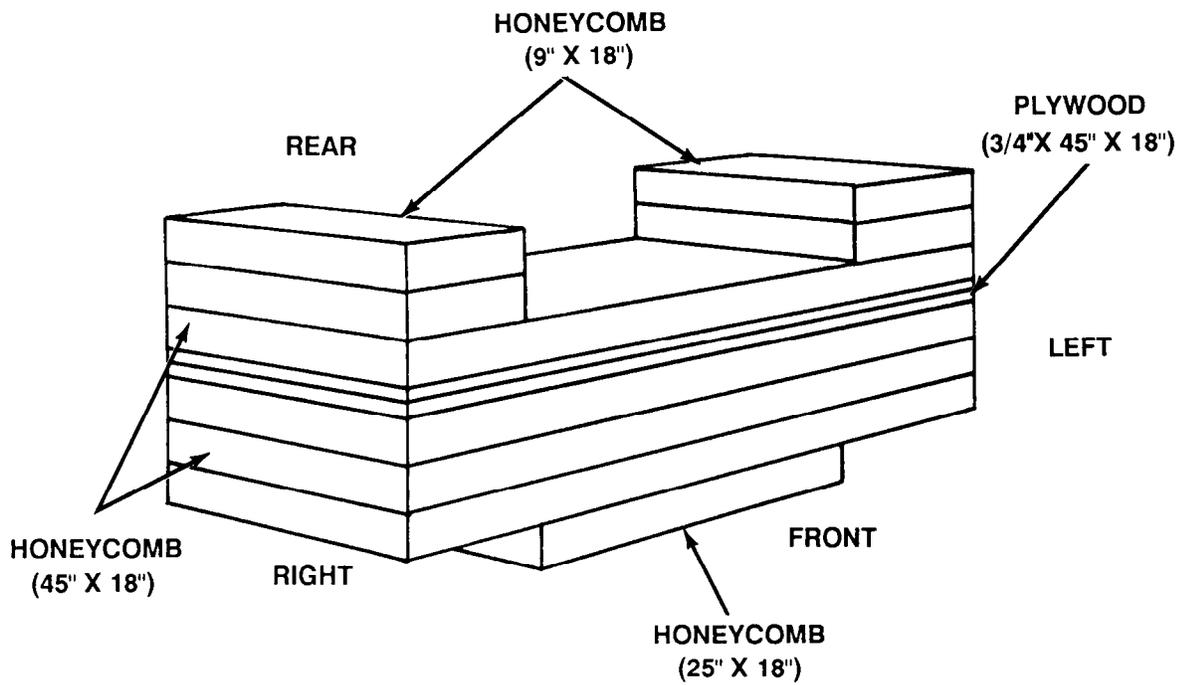
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
7	1	25	24	Honeycomb	Place honeycomb as the base.
	3	45	24	Honeycomb	Center honeycomb on top of the base.
	2	45	24	3/4-inch plywood	Place plywood on top of the 45- by 24-inch honeycomb.
	1	45	24	Honeycomb	Place honeycomb on top of the plywood.
	2	27	24	Honeycomb	Center honeycomb on top of the 45- by 24-inch honeycomb.

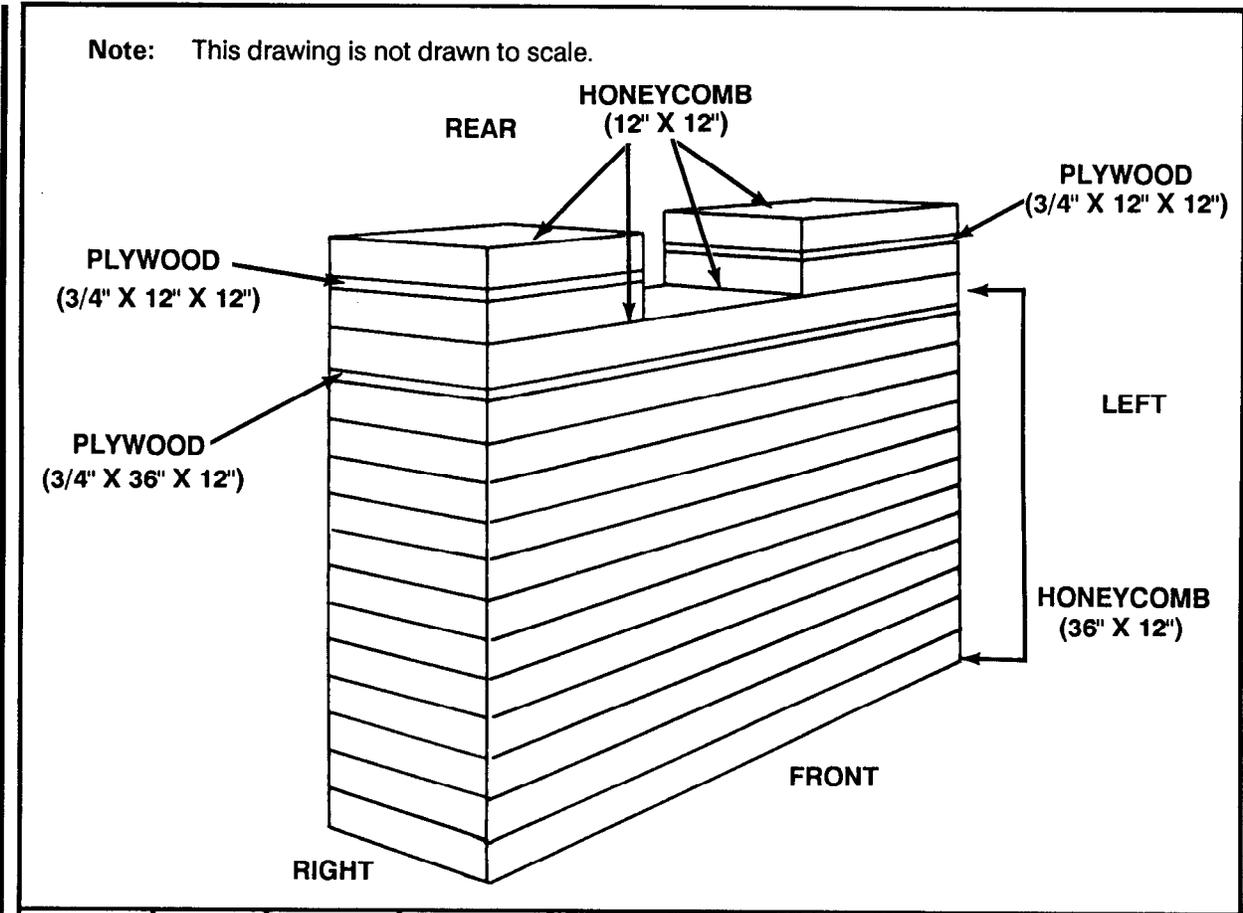
Figure 5-9. Honeycomb stack 7 prepared

Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
8	1	25	18	Honeycomb	Place honeycomb as the base.
	3	45	18	Honeycomb	Center honeycomb on top of the base.
	2	45	18	3/4-inch plywood	Place plywood on top of the 45- by 18-inch honeycomb.
	1	45	18	Honeycomb	Place honeycomb on top of the plywood.
	4	9	18	Honeycomb	Place two pieces of honeycomb on each side of the 45- by 18-inch honeycomb even with the 18-inch edge.

Figure 5-10. Honeycomb stack 8 prepared



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
9	10	36	12	Honeycomb	Place honeycomb as the base.
	1	36	12	3/4-inch plywood	Place plywood on top of the base.
	1	36	12	Honeycomb	Place honeycomb on top of the plywood.
	2	12	12	Honeycomb	Place one piece of honeycomb on each side of the 36- by 12-inch honeycomb even with the 12-inch edge.
	2	12	12	3/4-inch plywood	Place one piece of plywood on top of each piece of the 12- by 12-inch honeycomb.
	2	12	12	Honeycomb	Place one piece of honeycomb on top of each piece of plywood.

Figure 5-11. Honeycomb stack 9 prepared

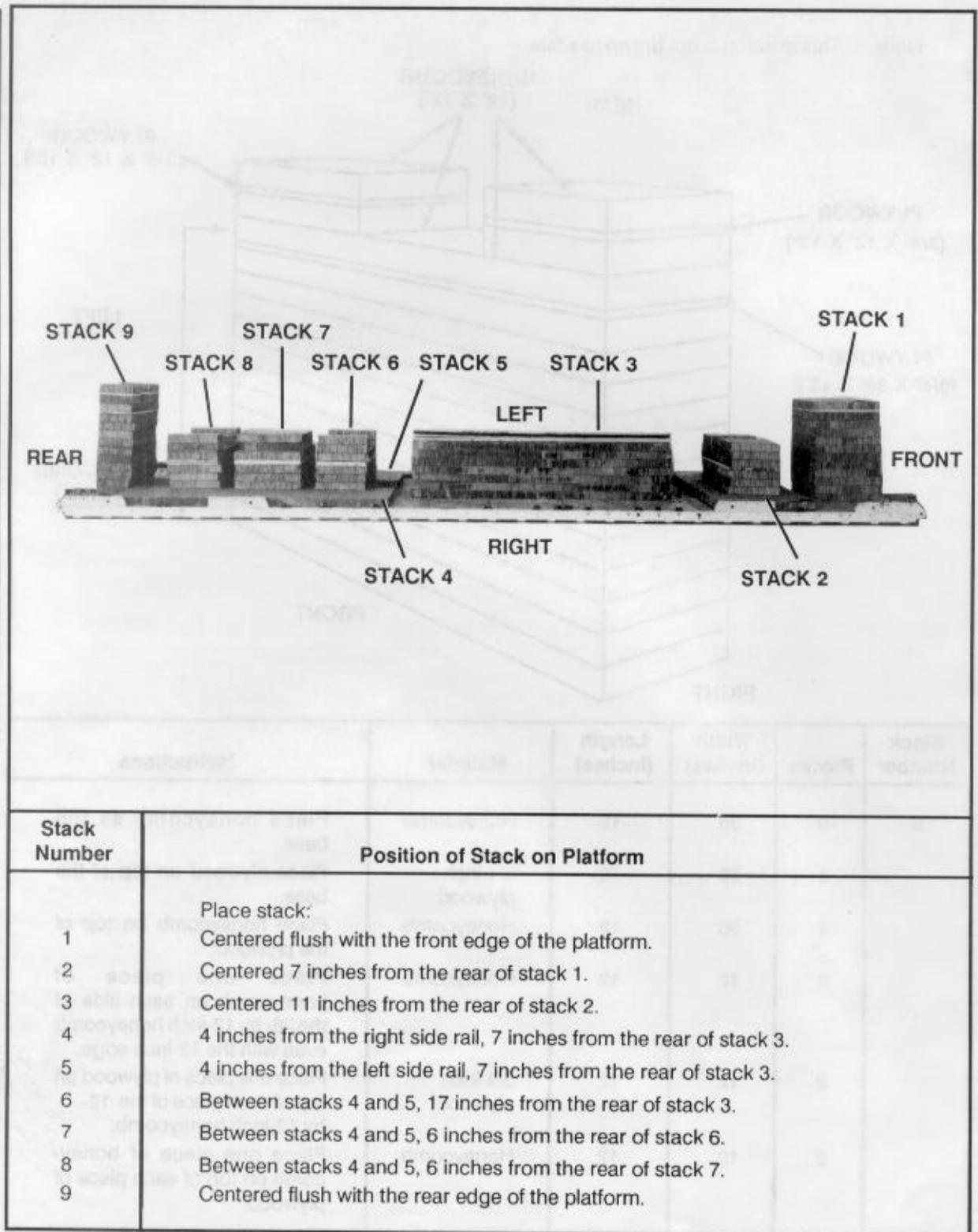


Figure 5-12. Honeycomb stacks positioned on platform

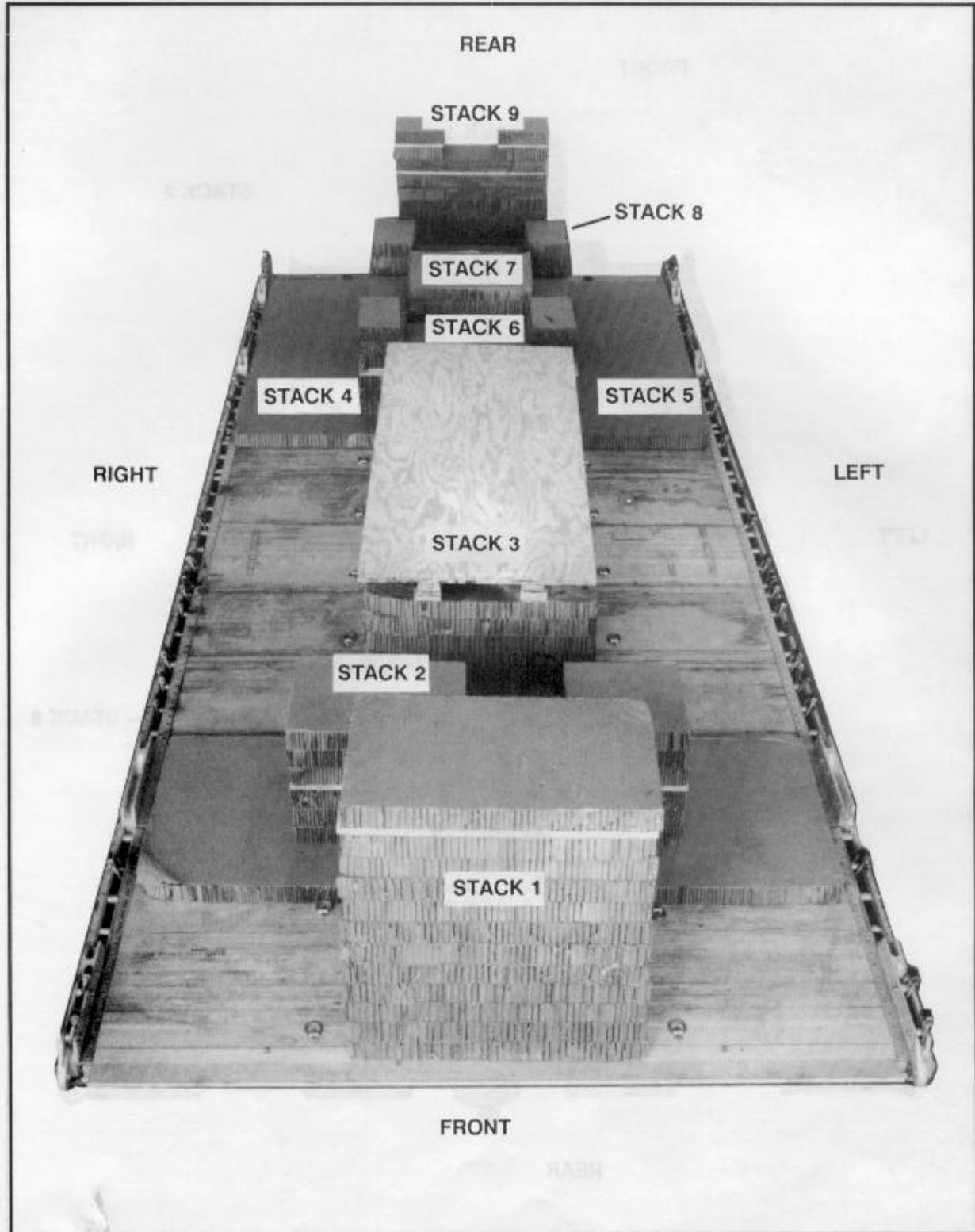


Figure 5-13. Front view of honeycomb stacks positioned on platform

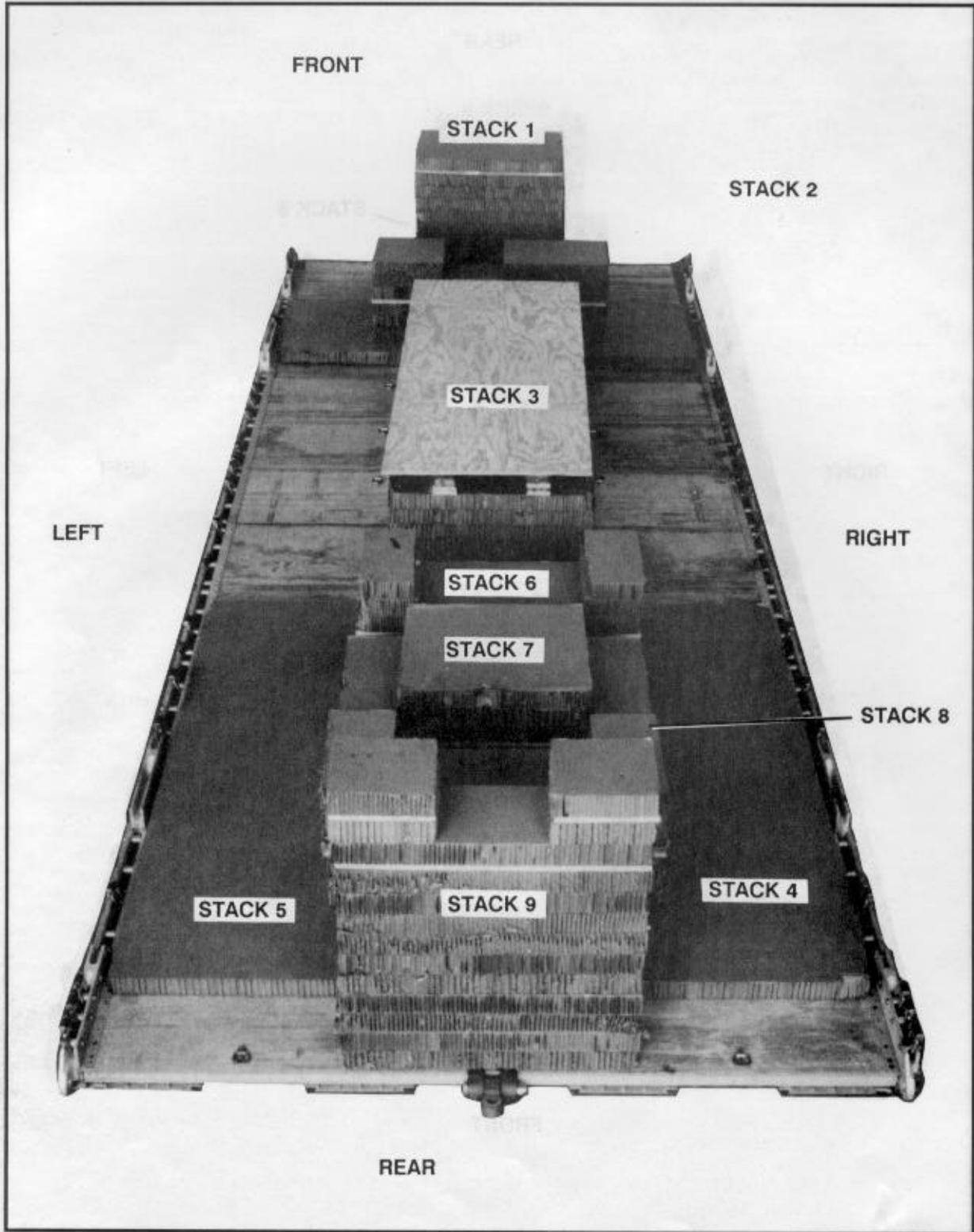


Figure 5-14. Rear view of honeycomb stacks positioned on platform

5-4. Removing Truck Components

Remove the cab top cover, cab top frame, cargo body cover, mirror assemblies, exhaust stack, spare wheel assembly, side rack troop seats, body side racks, and bow and stack assemblies according to TM 9-2320-260-10 and TM 9-2320-260-20P.

5-5. Preparing Truck

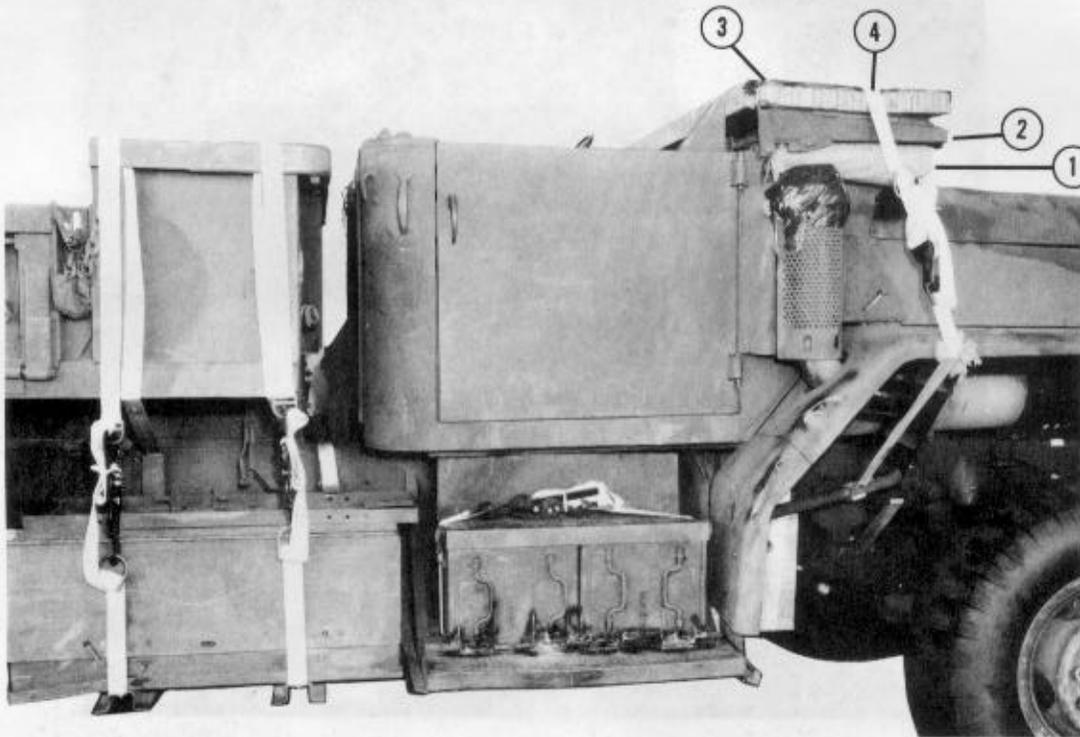
Prepare the truck as shown in Figure 5-15 and as described below.

a. Make sure the fuel tank is not more than 1/2 full.

b. Make sure the fire extinguisher is charged and the safety pin is secure. Pad the fire extinguisher, and secure it to the vehicle.

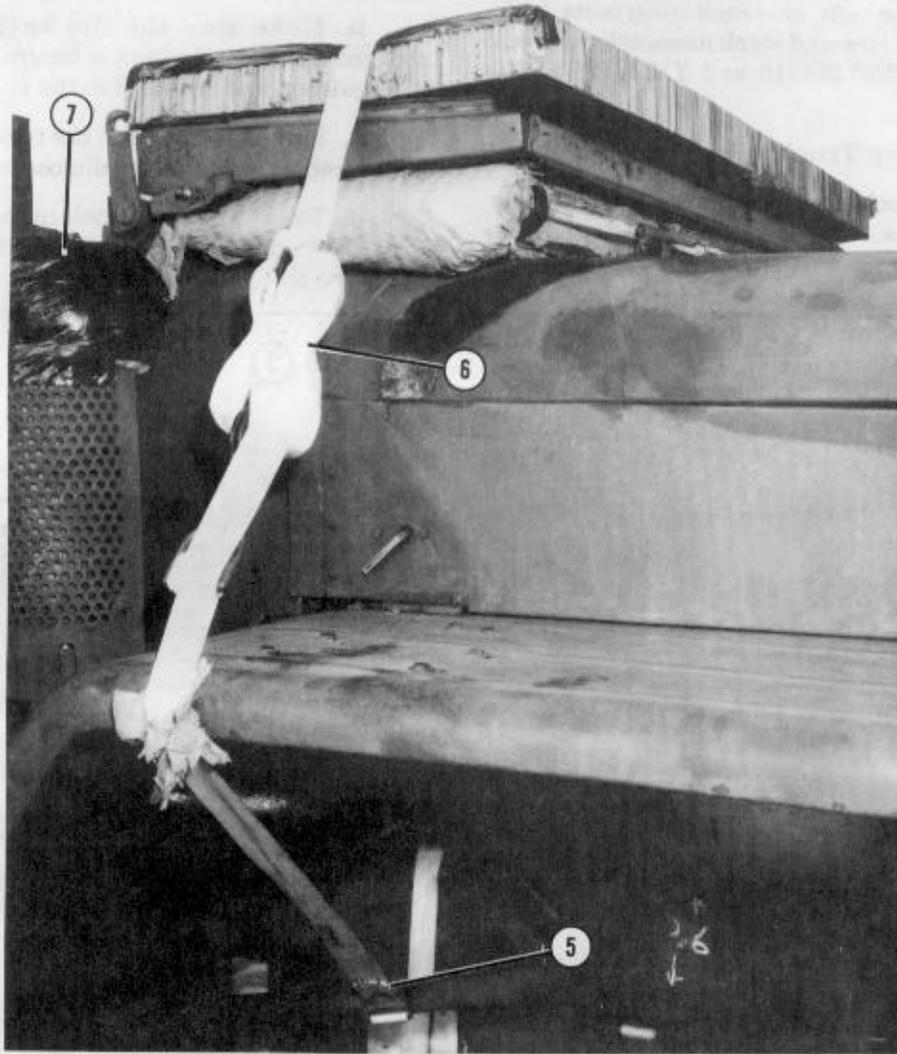
c. Fill the toolbox and the tool stowage box with scrap honeycomb or cellulose wadding.

d. Place the pioneer tools in their links, and fasten the retaining straps. Tie the tools in place with type III nylon cord.



- ① Wrap a 3/4- by 18- by 60-inch piece of plywood in cellulose wadding, and tape the wadding in place. Place the plywood on the hood of the truck.
- ② Fold the windshield down on the plywood.
- ③ Place a 24- by 60-inch piece of honeycomb on top of the windshield. Tape the edges of honeycomb with tape.
- ④ Pass the end of a 15-foot tiedown strap around the left front fender brace and through its own D-ring. Pull the free end tight, and lay the strap across the honeycomb.

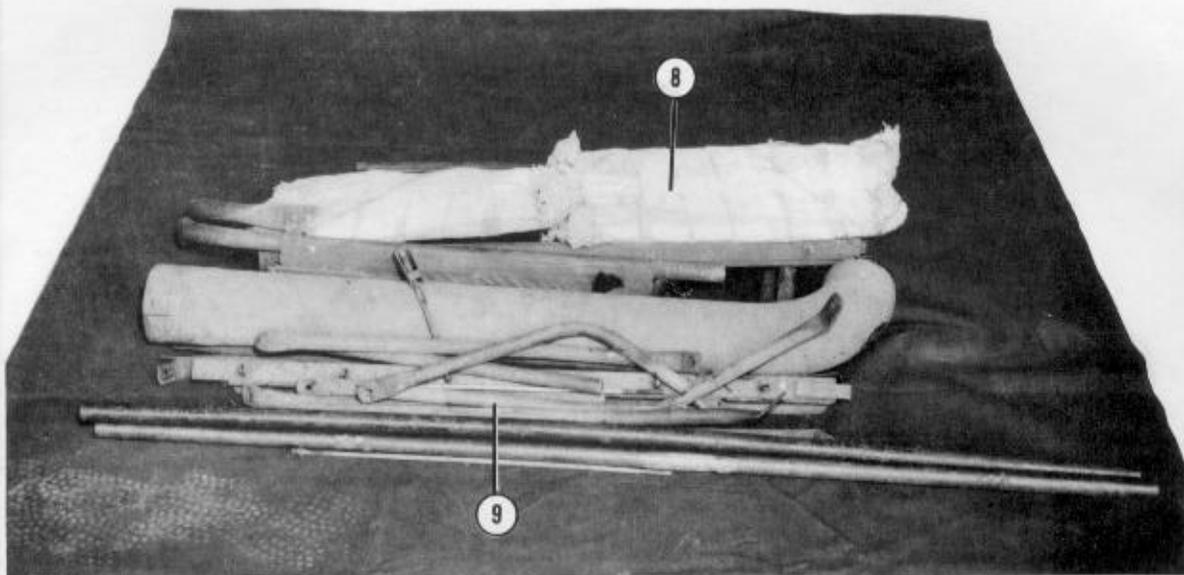
Figure 5-15. Truck prepared



- ⑤ Pass the end of a 15-foot tiedown strap around the right front fender brace and through its own D-ring. Pull the free end of the strap tight.
- ⑥ Secure the ends of the two 15-foot tiedown straps according to FM 10-500-2/TO 13C7-1-5.
- ⑦ Pad the exhaust pipe with cellulose wadding, and tape the wadding in place.

Note: Pad the fenders with cellulose wadding where the lashings will touch, and tape the wadding in place.

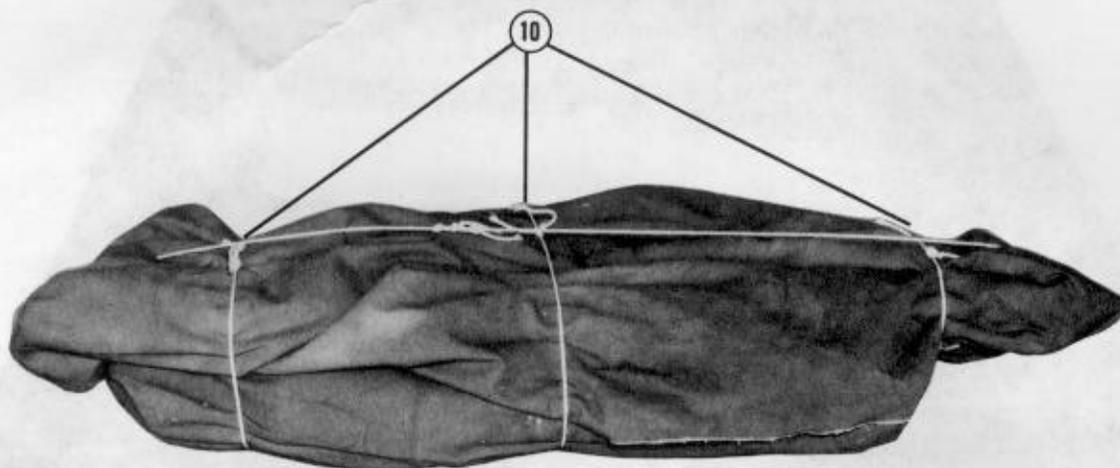
Figure 5-15. Truck prepared (continued)



- ⑧ Wrap the mirror assemblies in cellulose wadding. Tape the wadding in place. Place the mirror assemblies on the cargo body cover.
- ⑨ Place the cab top frame and the exhaust stack on the cab top cover. Pad the sharp edges with cellulose wadding, and tape the wadding in place.

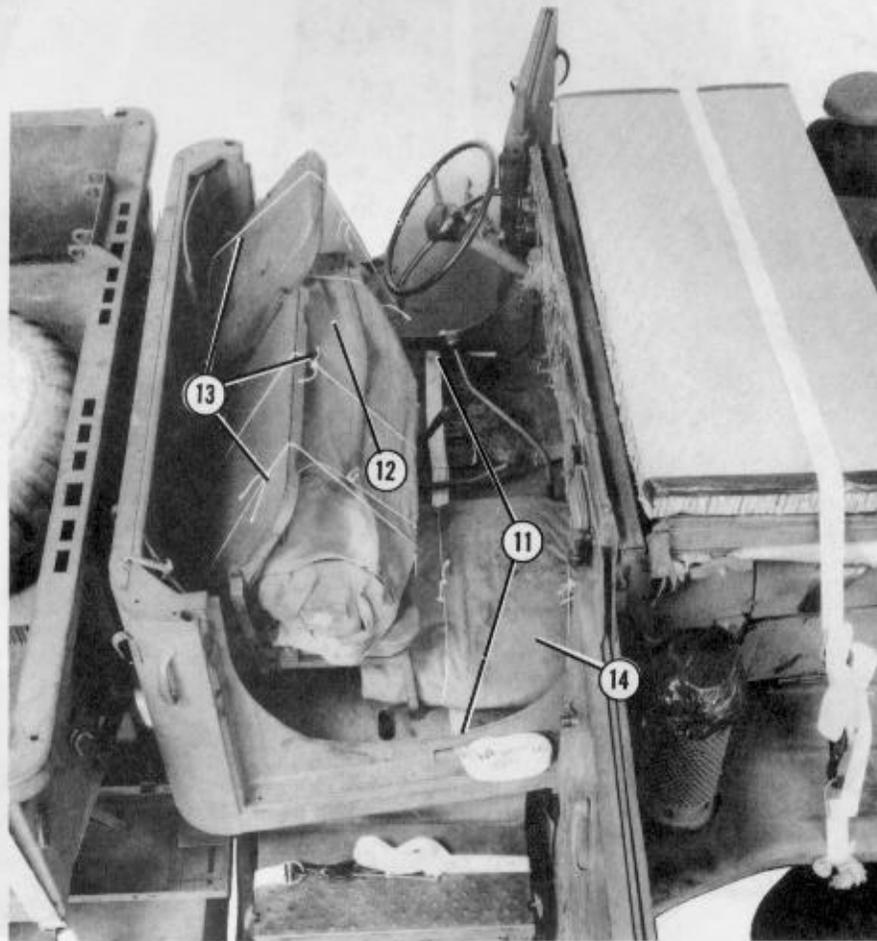
Note: Place other small components on the cargo body cover if needed.

Figure 5-15. Truck prepared (continued)



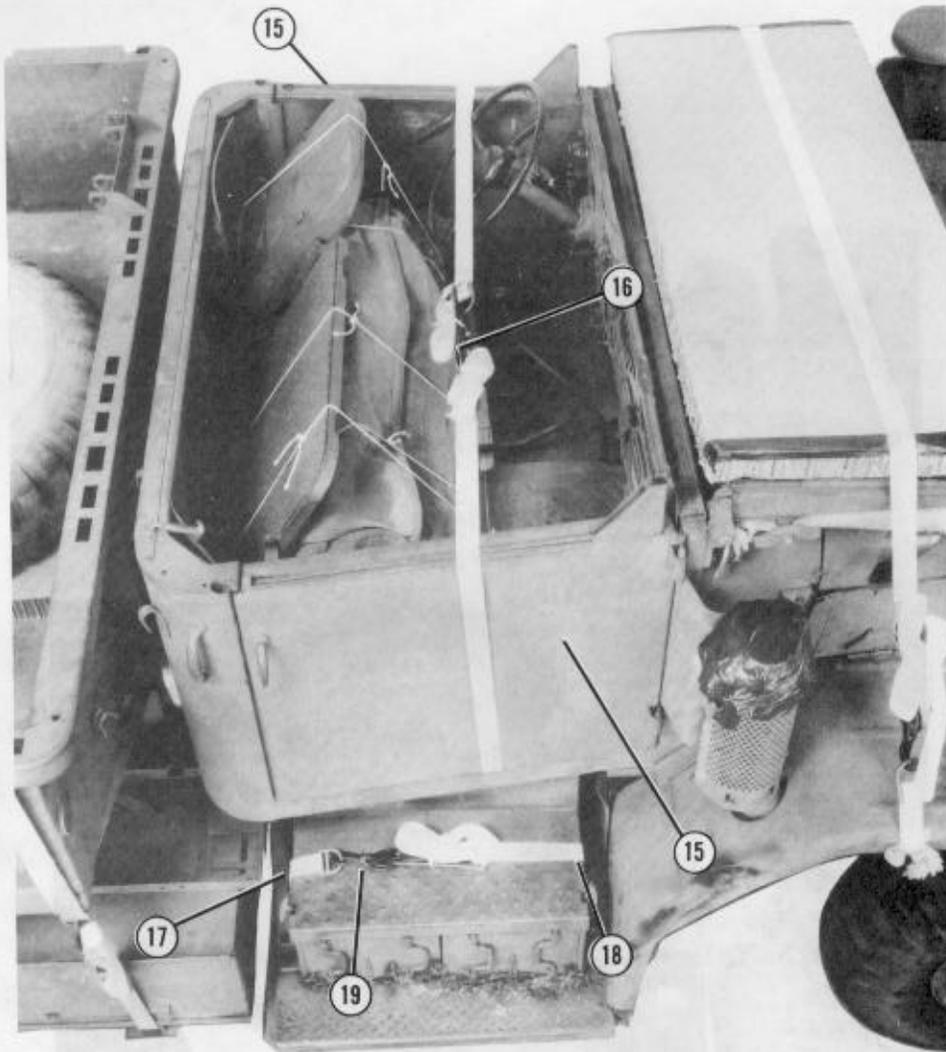
- ⑩ Wrap the cargo body cover over the items placed on it. Tie the cover in place with type III nylon cord.

Figure 5-15. Truck prepared (continued)



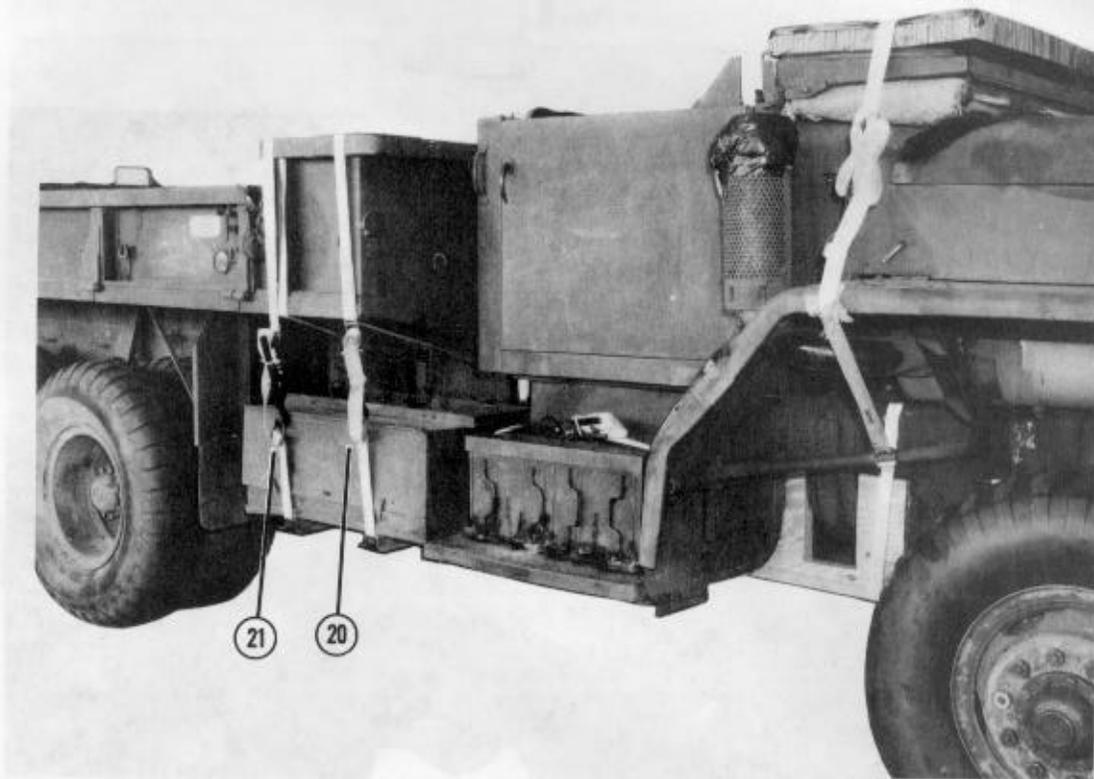
- ⑪ Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C7-1-5. Lay the strap across the cab floor, and pass the ends of the strap through the slots in the door frame.
- ⑫ Place the items wrapped in the cargo body cover on the truck seats.
- ⑬ Fold the back of the seats down against the cargo body cover. Tie the back of the seats against the cover with type III nylon cord.
- ⑭ Fold the cab top cover, and place it on the floor of the cab.

Figure 5-15. Truck prepared (continued)



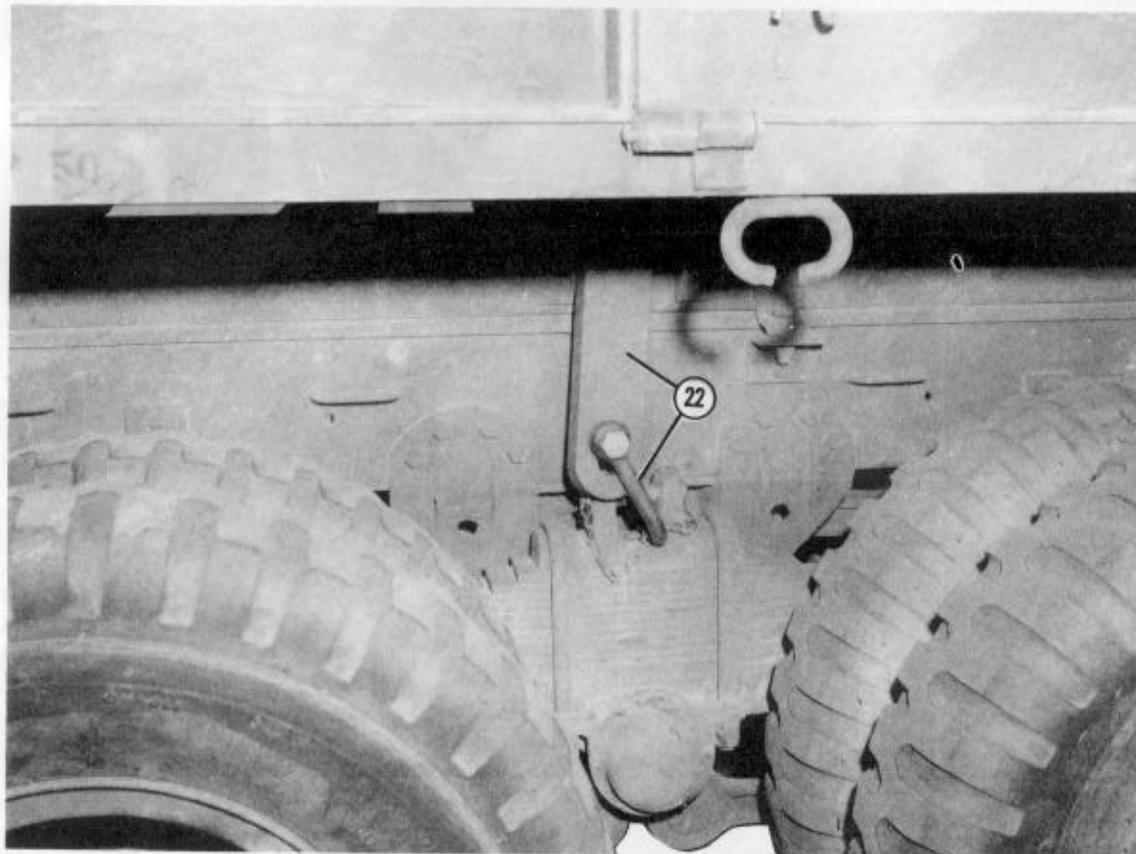
- ⑮ Close the truck doors.
- ⑯ Pass the ends of the 30-foot tiedown strap (installed in step 11) over the cab doors. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑰ Pass one end of a 15-foot tiedown strap around the rear running board support and back to the top of the battery box.
- ⑱ Pass the other end of the 15-foot tiedown strap around the front running board support and back to the top of the box.
- ⑲ Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-15. Truck prepared (continued)



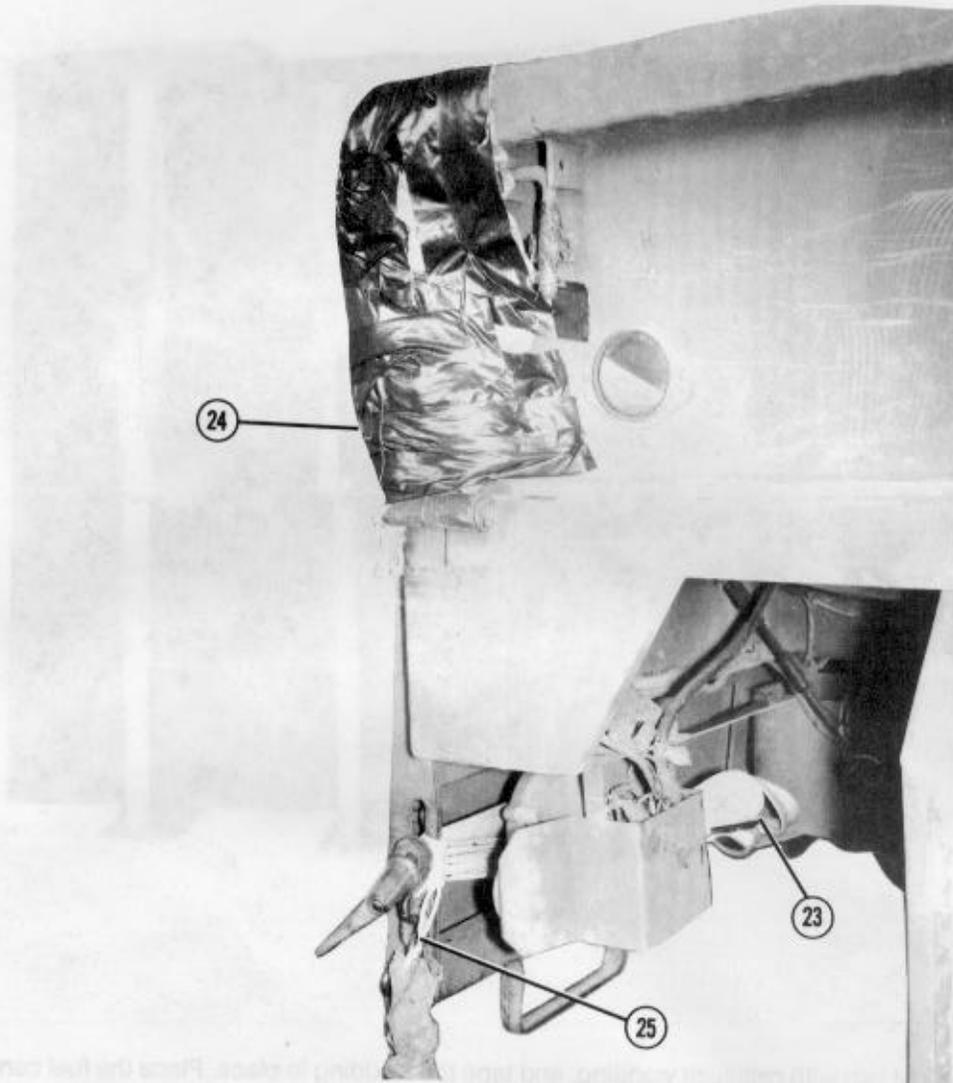
- 20 Pass the free end of a 15-foot tiedown strap through the first side rack socket, through the front toolbox hanger, and under the toolbox. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- 21 Pass the free end of a second 15-foot strap through the second side rack socket, through the rear toolbox hanger, and under the toolbox. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-15. Truck prepared (continued)



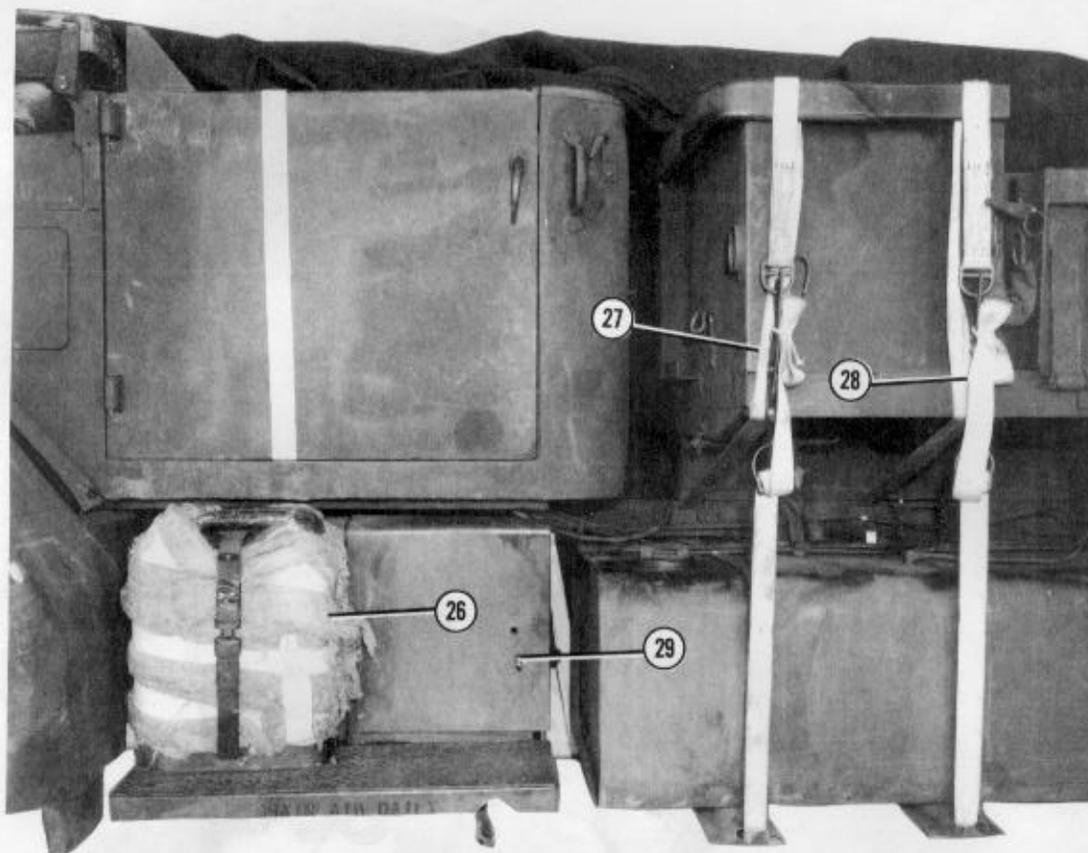
- 22 Lower a suspension extension bracket down through one access hole in the body of the truck. Bolt the bracket to the spring saddle with a large suspension clevis. Bolt a second bracket to the spring saddle on the opposite side of the truck in the same manner.

Figure 5-15. Truck prepared (continued)



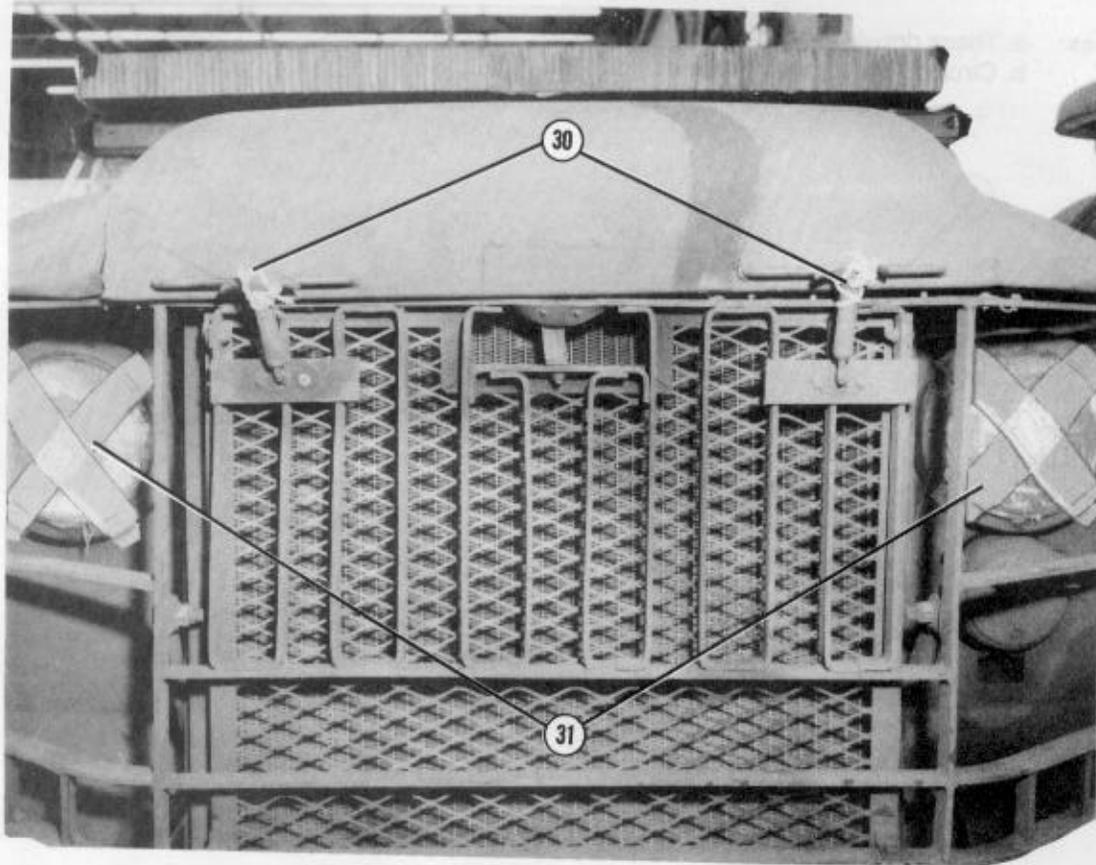
- ②3 Lower the truck tailgate. Run a 15-foot tiedown strap through the tailgate and through the rear tiedown point on each mainframe rail. Secure the D-rings according to FM 10-500-2/TO 13C7-1-5.
- ②4 Pad the side body at each side of the truck with cellulose wadding, and tape the wadding in place.
- ②5 Tie the tailgate chains to the tailgate with lengths of type III nylon cord.

Figure 5-15. Truck prepared (continued)



- ②6 Pad the fuel can with cellulose wadding, and tape the wadding in place. Place the fuel can in its bracket, and secure it with the retainer strap.
- ②7 Pass the free end of a 15-foot tiedown strap through the first side rack socket and through the front fuel tank mount. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ②8 Pass the free end of a 15-foot tiedown strap through the second side rack socket and through the rear fuel tank mount. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ②9 Pad the OVE with cellulose wadding, and place the OVE in the tool stowage box. Tie the door of the box closed with type III nylon cord.

Figure 5-15. Truck prepared (continued).



③⑩ Tie the hood closed with type III nylon cord.

③⑪ Tape the headlights.

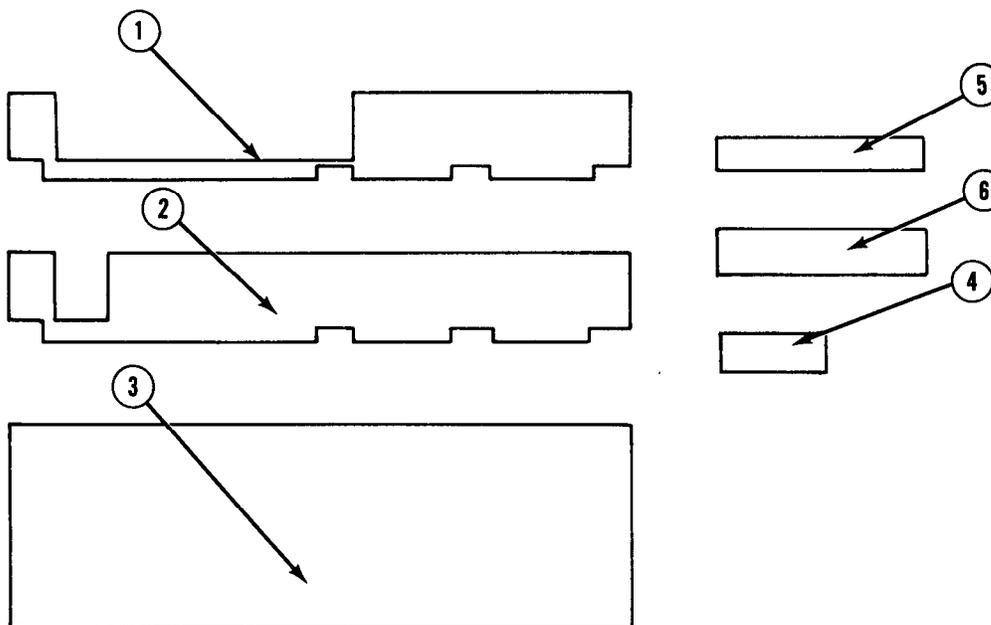
Note: If the truck you are rigging is equipped with a winch, tie the hook to the bumper with type III nylon cord.

Figure 5-15. Truck prepared (continued)

5-6. Building Frame Support

Use the material in Figure 5-16 to build the frame support. Build the frame support as shown in Figure 5-17.

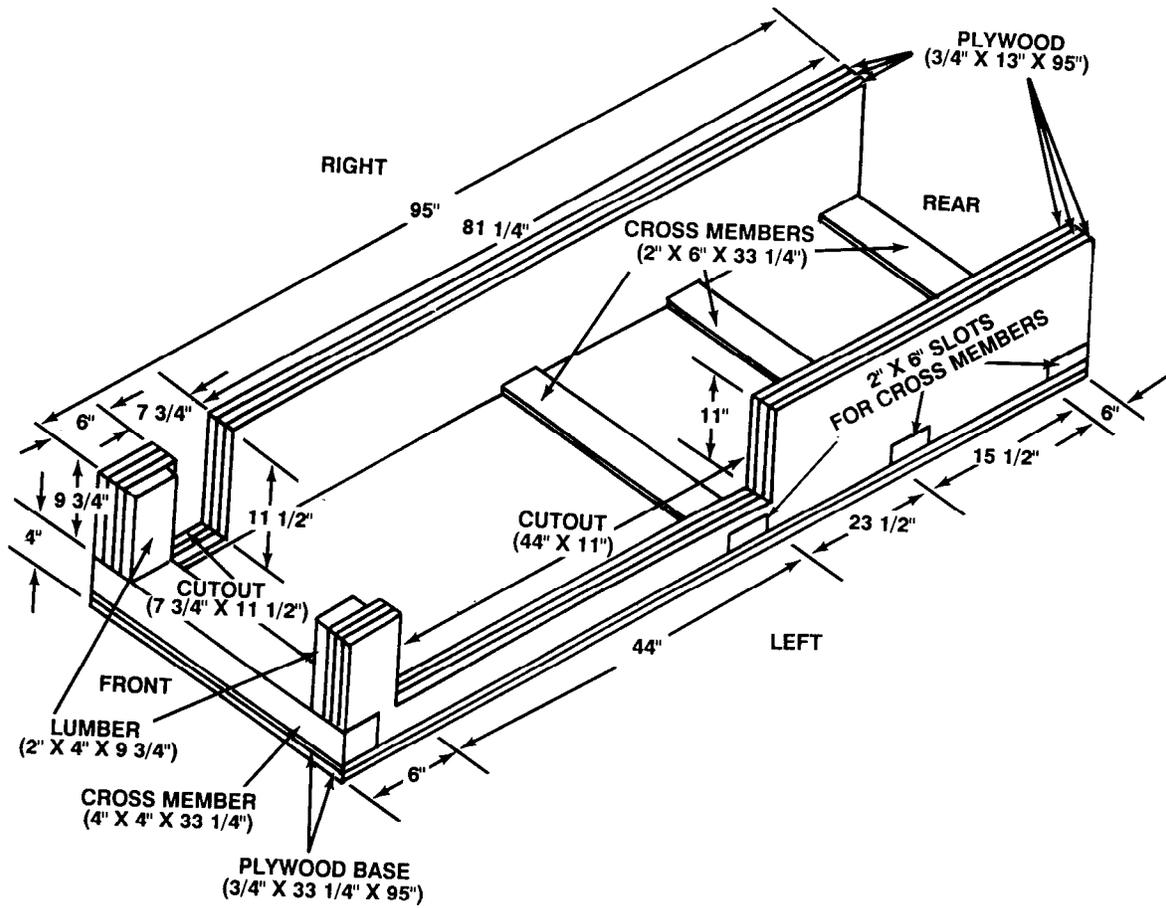
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	3	13	95	3/4-inch plywood
2	3	13	95	3/4-inch plywood
3	2	33 3/4	95	3/4-inch plywood
4	2	3 1/2 (actual)	9 3/4	2- by 4-inch lumber
5	1	3 1/2 (actual)	33 1/4	4- by 4-inch lumber
6	3	6	33 1/4	2- by 6-inch lumber

Figure 5-16. Material required for frame support

Note: This drawing is not drawn to scale.



Step:

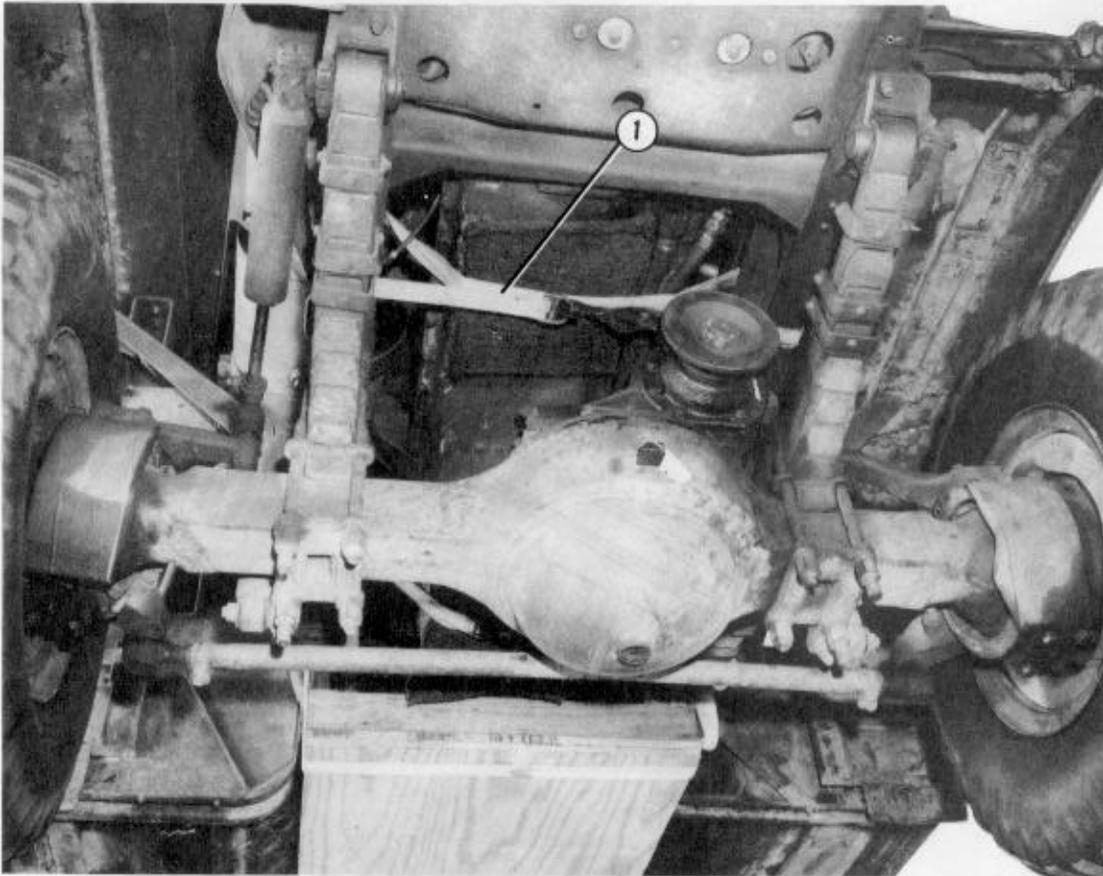
1. Construct the frame support as shown.
2. Secure the plywood and lumber in place, as shown, with eightpenny and sixteen-penny nails.

Figure 5-17. Frame support constructed

5-7. Installing Engine Supports and Frame Support

Install the engine supports and the frame support as shown in Figures 5-18 and 5-19 using three

15-foot tiedown straps and one 30-foot tiedown strap.



- ① Pass the end of a 15-foot tiedown strap around the right frame rail, under the front part of the oil pan, and around the left frame rail. Place a 12- by 12-inch piece of felt between the oil pan and the strap. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-18. Engine supports installed.



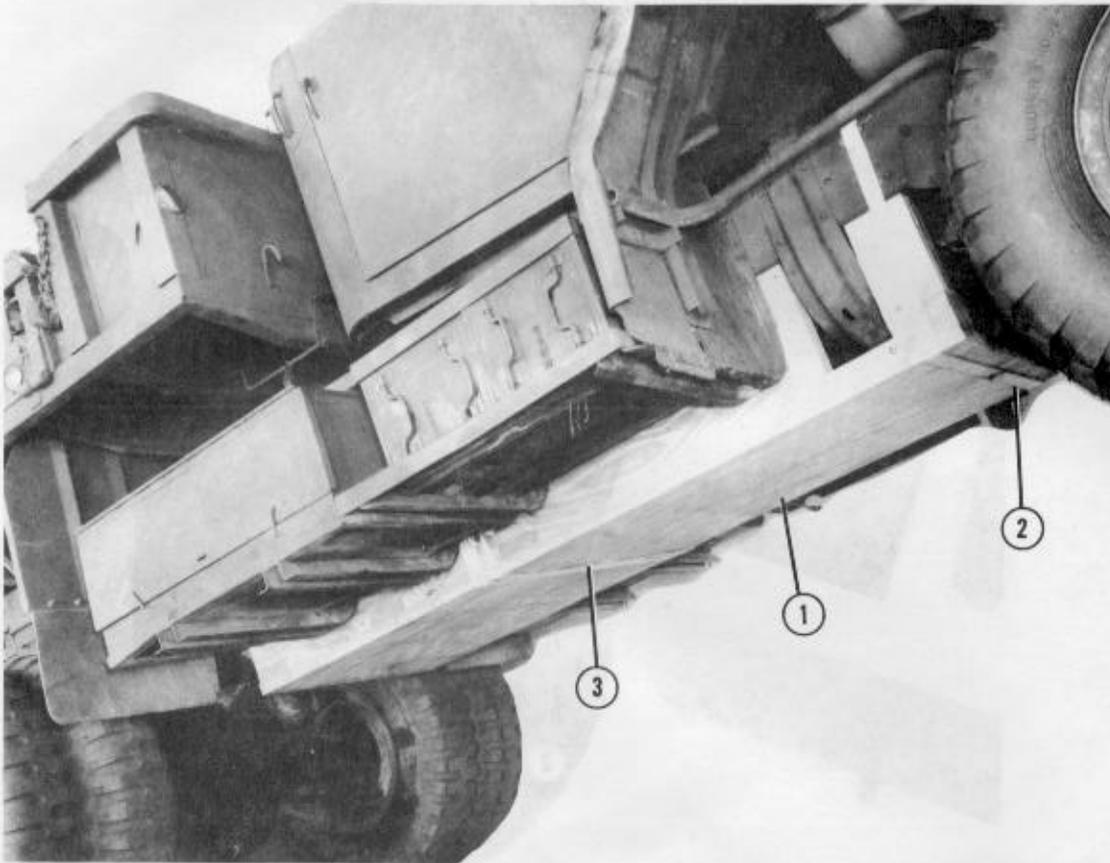
- ② Run a 15-foot tiedown strap through tiedown provision 4 on the right frame rail, under the rear of the oil pan, and through tiedown provision 4 on the left frame rail. Place a 12- by 12-inch piece of felt and a 3/4- by 12- by 12-inch piece of plywood between the oil pan and the strap. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-18. Engine supports installed (continued)

- Notes:
- Depending on the make and model of your truck, use a 30-foot tiedown strap and adapt the procedures in 2 below to install the second strap.
 - Position the load binders on the side of the frame support so that the load binders will not touch the honeycomb stack.

CAUTION

Ensure the frame support is not placed on hydraulic lines.



- Position the frame support under the mainframe as shown.
- Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C7-1-5. Pass one end of the strap around one mainframe rail near the front of the frame support. Pass the other end of the strap under the frame support and around the other mainframe rail. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- Pass the free end of a 15-foot tiedown strap around tiedown provision 6 on one mainframe rail, under the frame support, and around tiedown provision 6 on the other mainframe rail. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-19. Frame support installed

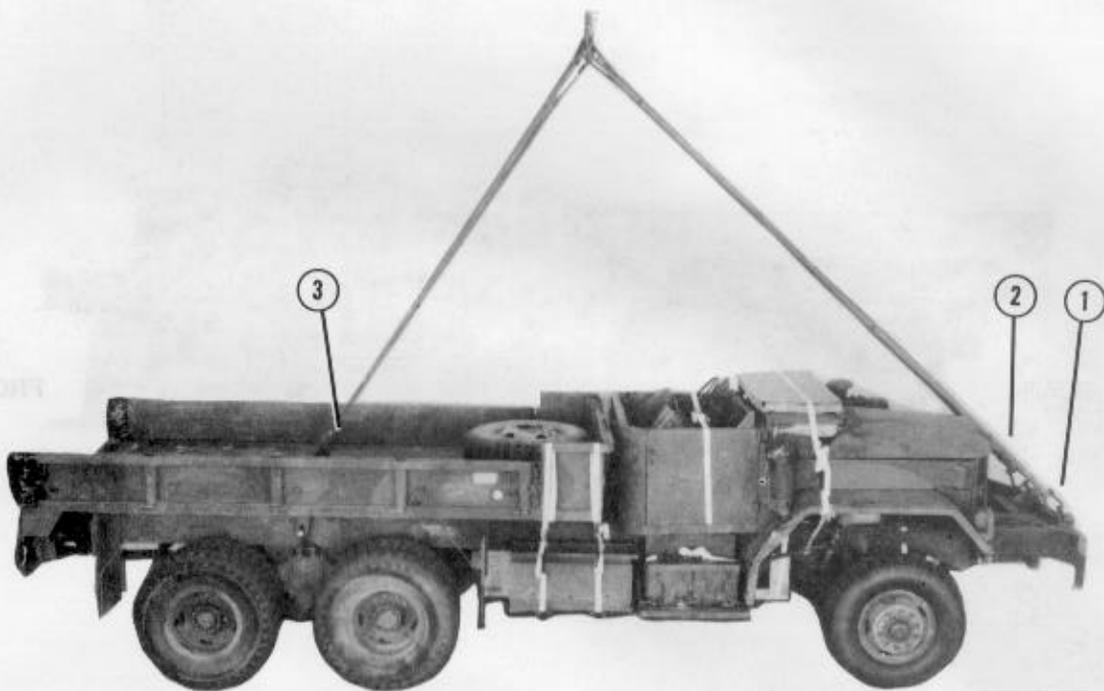
5-8. Positioning Truck

Position the truck as described below.

a. Install two 16-foot (4-loop) and two 12-foot (4-loop), type XXVI nylon webbing slings as shown in Figure 5-20.

b. Position the truck on the honeycomb stacks as shown in Figure 5-21.

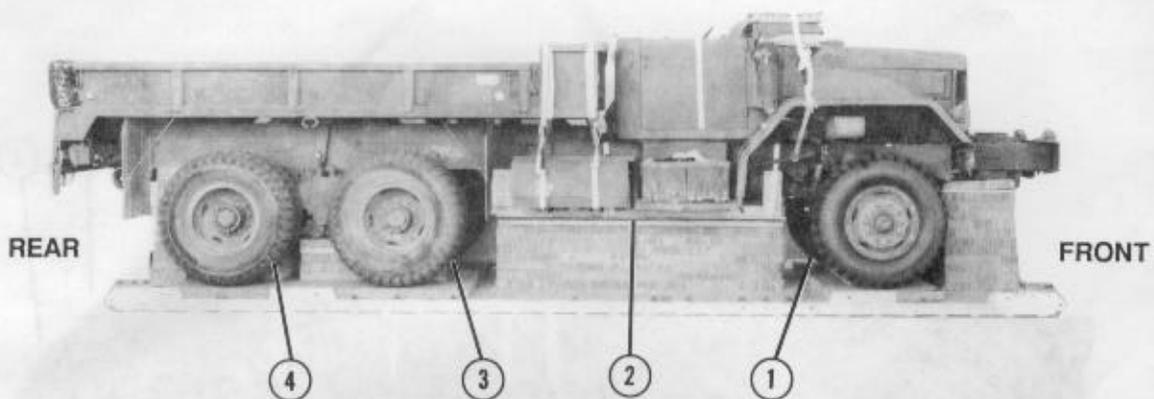
- Notes:**
- a. Other slings of equal or greater strength may be used to lift the truck.
 - b. Pad or tape the area where the slings touch the truck to protect the slings.



- ① Place a spacer from a four-point link assembly in one end loop of a 16-foot (4-loop), type XXVI nylon webbing sling. Fit a large suspension clevis on a front lifting shackle, and bolt the end loop with the spacer to the clevis.
- ② Install another 16-foot (4-loop), type XXVI nylon webbing sling on the other front lifting shackle as described in step 1 above.
- ③ Fit a large suspension clevis on each rear suspension bracket. Place a spacer from a four-point link assembly in one end loop of two 12-foot (4-loop), type XXVI nylon webbing slings. Bolt the end loop of one sling with the spacer to each large suspension clevis on the rear suspension brackets.

Figure 5-20. Lifting slings installed

- Notes:
- The honeycomb may need to be adjusted slightly when the truck is positioned on the stacks.
 - The front and rear overhang will vary depending on the make and model of the truck.



Lift the truck with the lifting slings. Position the truck on the honeycomb stacks with:

- ① The front axle centered on stack 2.
- ② The mainframe support centered on stack 3.
- ③ The front dual axle centered on stack 6.
- ④ The rear dual axle centered on stack 8.

Note: After the truck is positioned, remove the lifting slings.

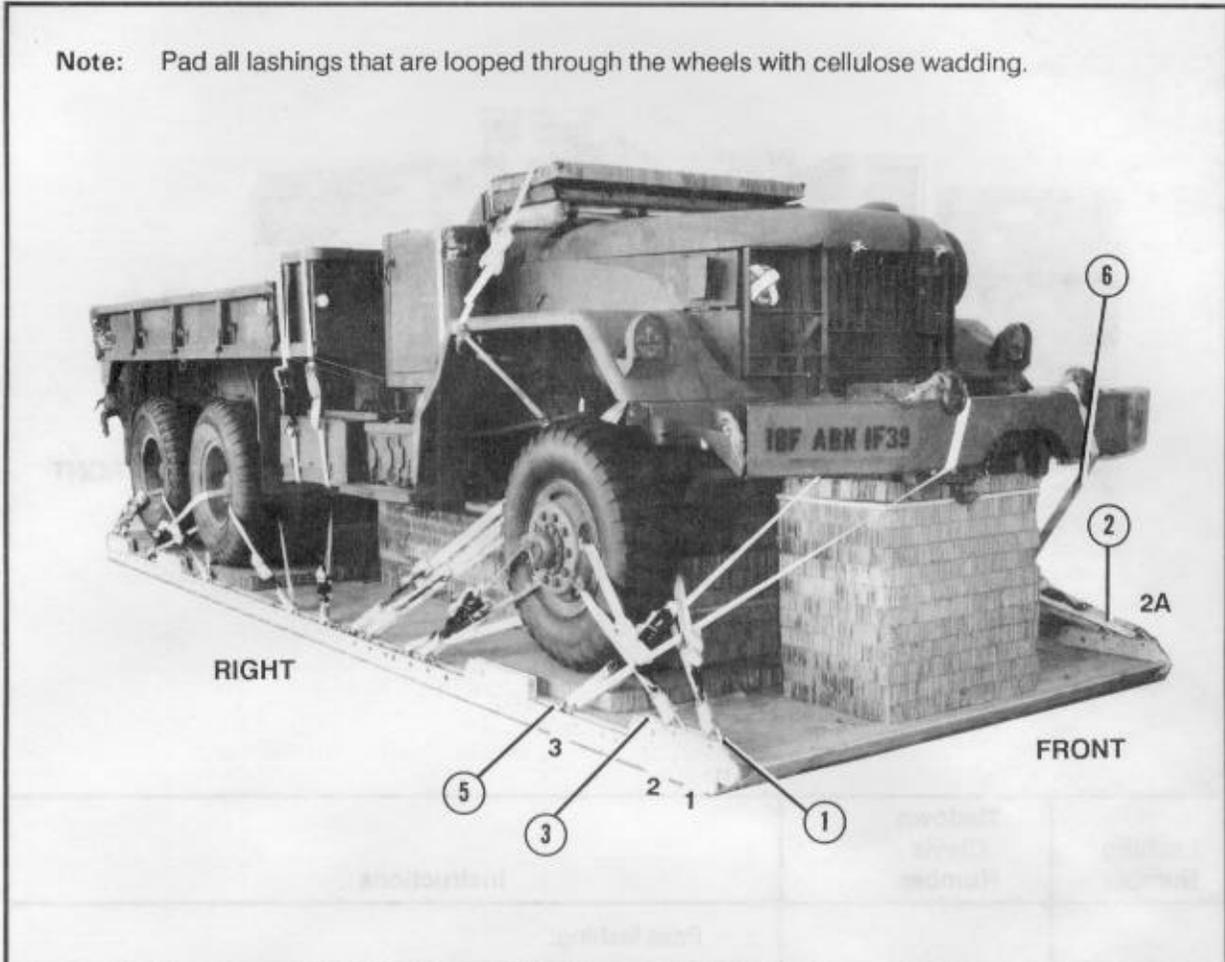
Figure 5-21. Truck positioned

5-9. Installing Lashings

Lash the truck to the platform using twenty-eight 15-foot tiedown assemblies as shown in Figures

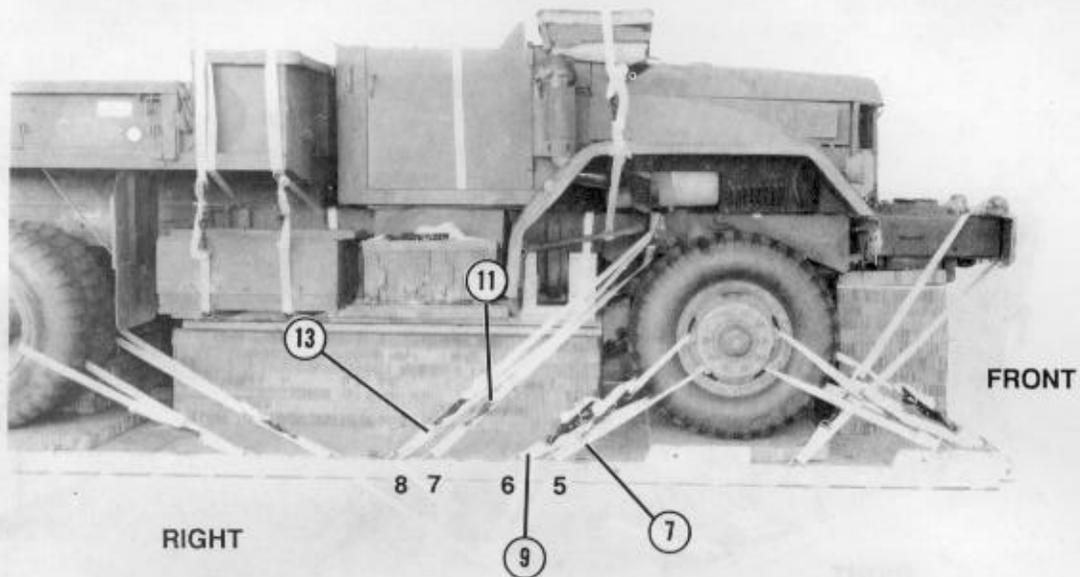
5-22 through 5-26. Secure the ends of the lashings according to FM 10-500-2/TO 13C7-1-5.

Note: Pad all lashings that are looped through the wheels with cellulose wadding.



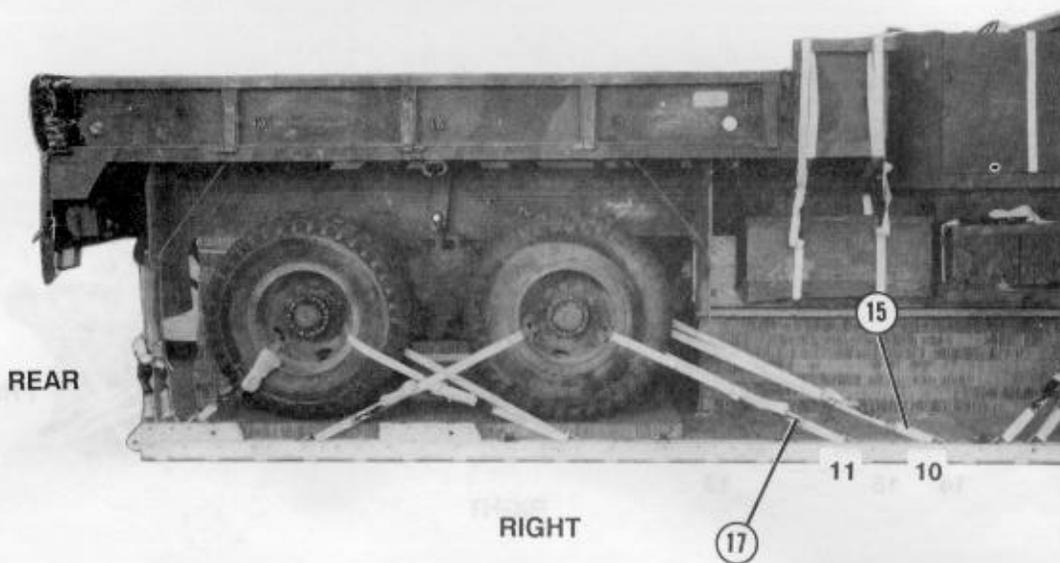
Lashing Number	Tiedown Clevis Number	Instructions
1	1	Pass lashing: Around the front axle, right side.
2	1A	Around the front axle, left side.
3	2	Through the front wheel, right side.
4	2A	Through the front wheel, left side.
5	3	Around the front bumper, inside the lifting shackle, right side.
6	3A	Around the front bumper, inside the lifting shackle, left side.

Figure 5-22. Lashings 1 through 6 installed



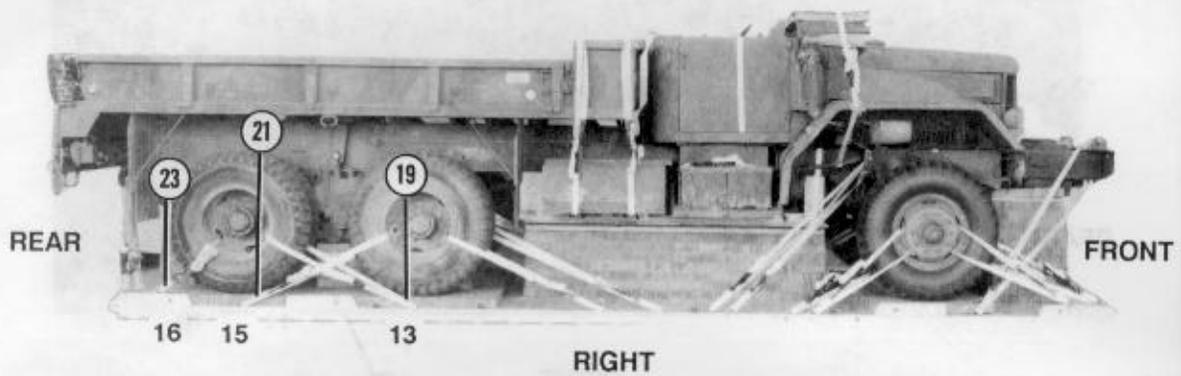
Lashing Number	Tiedown Clevis Number	Instructions
7	5	Pass lashing: Through the front wheel, right side.
8	5A	Through the front wheel, left side.
9	6	Around the front axle, right side.
10	6A	Around the front axle, left side.
11	7	Around the mainframe in front of the spring bracket, right side.
12	7A	Around the mainframe in front of the spring bracket, left side.
13	8	Around the mainframe in front of the spring bracket, right side.
14	8A	Around the mainframe in front of the spring bracket, left side.

Figure 5-23. Lashings 7 through 14 installed



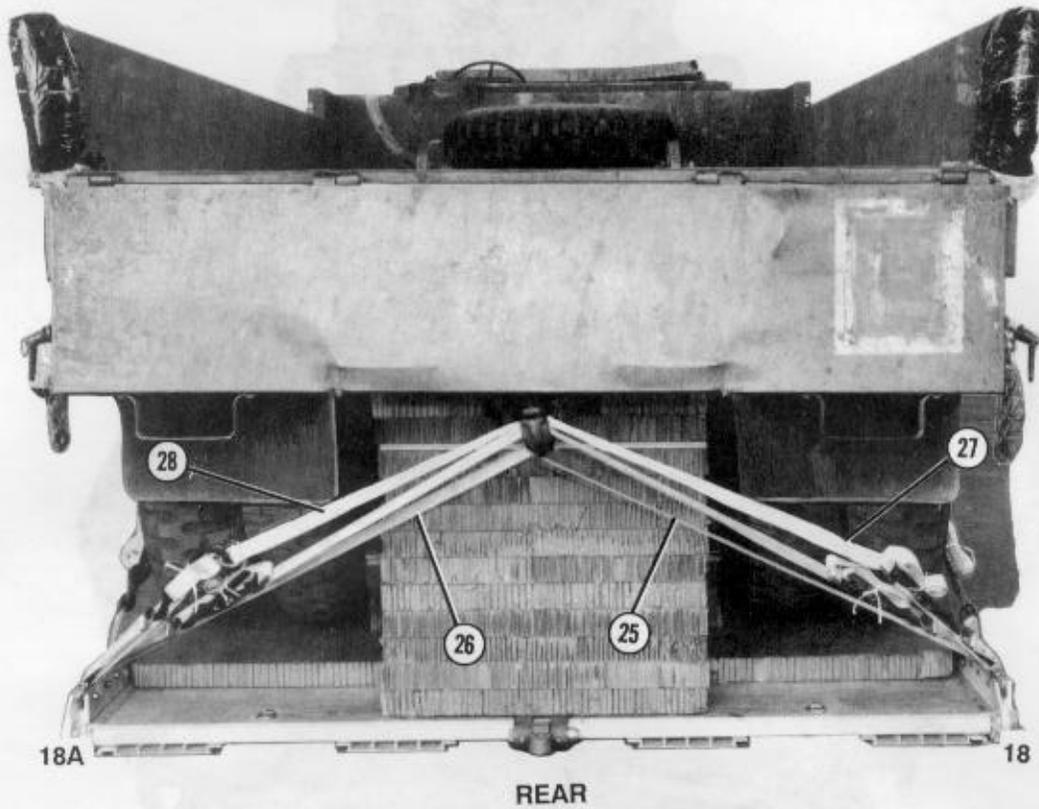
Lashing Number	Tiedown Clevis Number	Instructions
15	10	Pass lashing: Around the front spring bracket of the front dual wheel axle spring, right side.
16	10A	Around the front spring bracket of the front dual wheel axle spring, left side.
17	11	Through the front outside dual wheel, right side.
18	11A	Through the front outside dual wheel, left side.

Figure 5-24. Lashings 15 through 18 installed



Lashing Number	Tiedown Clevis Number	Instructions
19	13	Pass lashing: Through the rear outside dual wheel, right side.
20	13A	Through the rear outside dual wheel, left side.
21	15	Through the front outside dual wheel, right side.
22	15A	Through the front outside dual wheel, left side.
23	16	Through the rear outside dual wheel, right side.
24	16A	Through the rear outside dual wheel, left side.

Figure 5-25. Lashings 19 through 24 installed

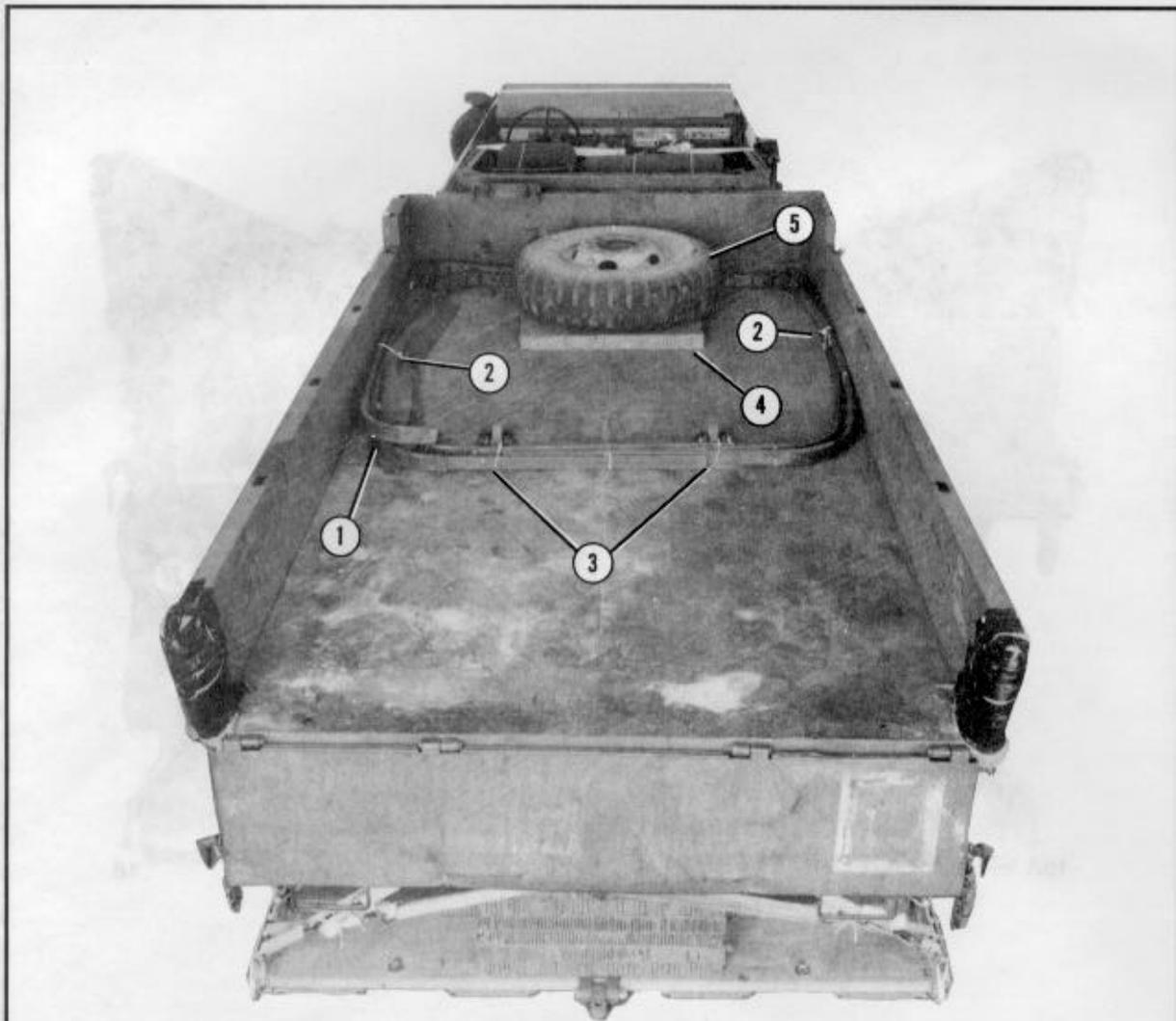


Lashing Number	Tiedown Clevis Number	Instructions
25	17	Pass lashing:
26	17A	Through the towing pintle.
27	18	Through the towing pintle.
28	18A	Through the towing pintle.

Figure 5-26. Lashings 25 through 28 installed

5-10. Stowing Truck Components

Stow the spare tire, cargo body bows, and the front rack as shown in Figure 5-27.



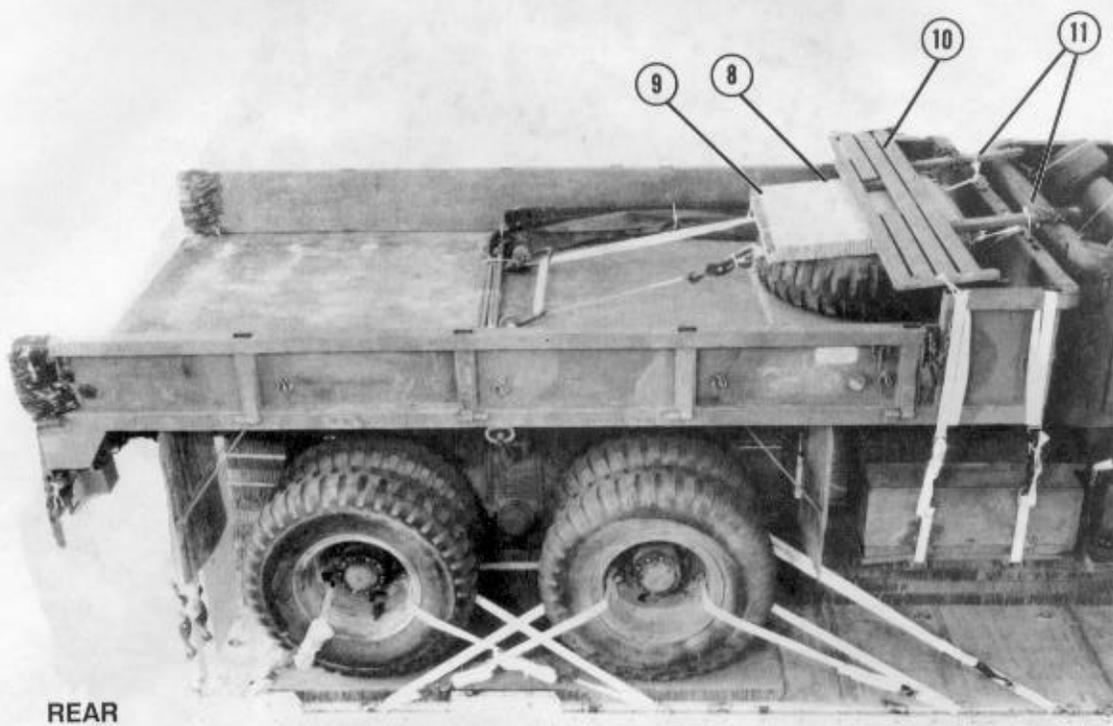
- ① Place the cargo body bows and the end curtain on the floor of the cargo body as shown.
- ② Tie the items together with type III nylon cord.
- ③ Tie the cargo body bows to the rear suspension brackets with type III nylon cord.
- ④ Center a 36- by 36-inch piece of honeycomb on the cargo body floor toward the front of the cargo body and against the cargo body bows.
- ⑤ Center the spare tire on the 36- by 36-inch honeycomb.

Figure 5-27. Truck components stowed.

**REAR**

- ⑥ Pass the free end of a 15-foot tiedown strap through the spare tire, down through one front rack socket, and up through another front rack socket. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑦ Pass the free end of a 15-foot tiedown strap through the spare tire and through the large clevises attached to the rear suspension brackets. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-27. Truck components stowed (continued)



- ⑧ Center a 36- by 36-inch piece of honeycomb on top of the spare tire.
- ⑨ Tape the edges of the honeycomb. Tie the honeycomb in place with type III nylon cord.
- ⑩ Place the front body rack on the 36- by 36-inch piece of honeycomb.
- ⑪ Tie the front body rack in place with type III nylon cord.

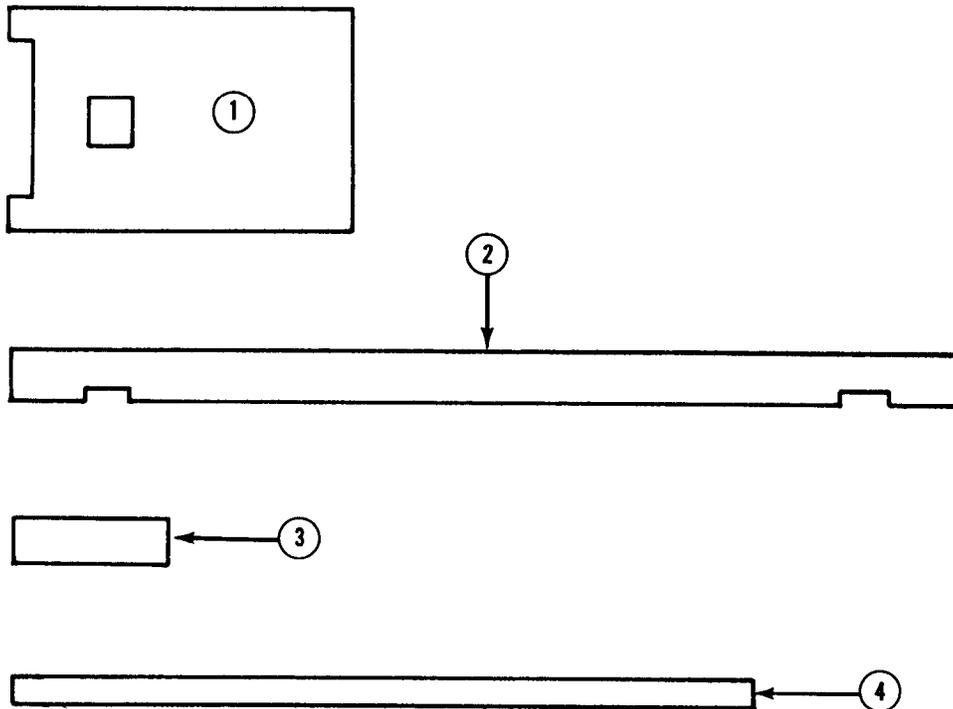
Figure 5-27. Truck components stowed (continued)

5-11. Constructing and Installing Rear Suspension Sling Spreader

Use the material in Figure 5-28 to build the rear suspension sling spreader. Build the rear suspension sling spreader as shown in Figure 5-29.

Install the rear suspension sling spreader as shown in Figure 5-30.

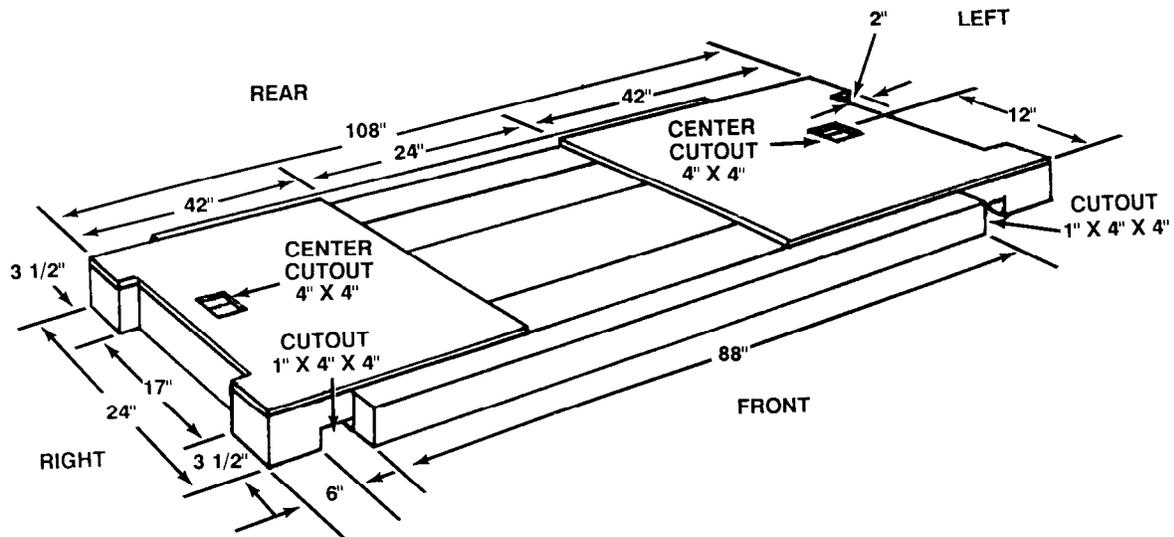
- Notes:**
- a. These drawings are not drawn to scale.
 - b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	24	42	3/4-inch plywood
2	2	4	108	4- by 4-inch lumber
3	2	4	17	4- by 4-inch lumber
4	2	2	88	2- by 4-inch lumber

Figure 5-28. Material required for the rear suspension sling spreader

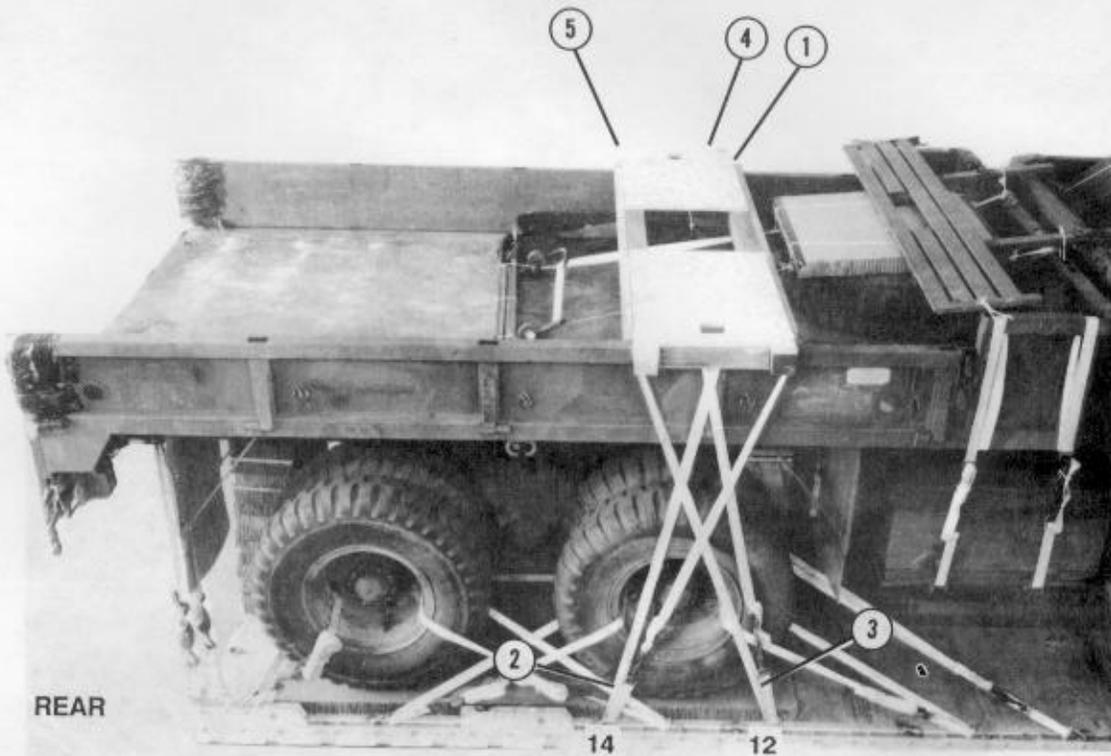
Note: This drawing is not drawn to scale.



Step:

1. Construct a rear suspension sling spreader as shown.
2. Secure the plywood and lumber in place, as shown, with eightpenny and sixteen-penny nails.

Figure 5-29. Rear sling spreader constructed

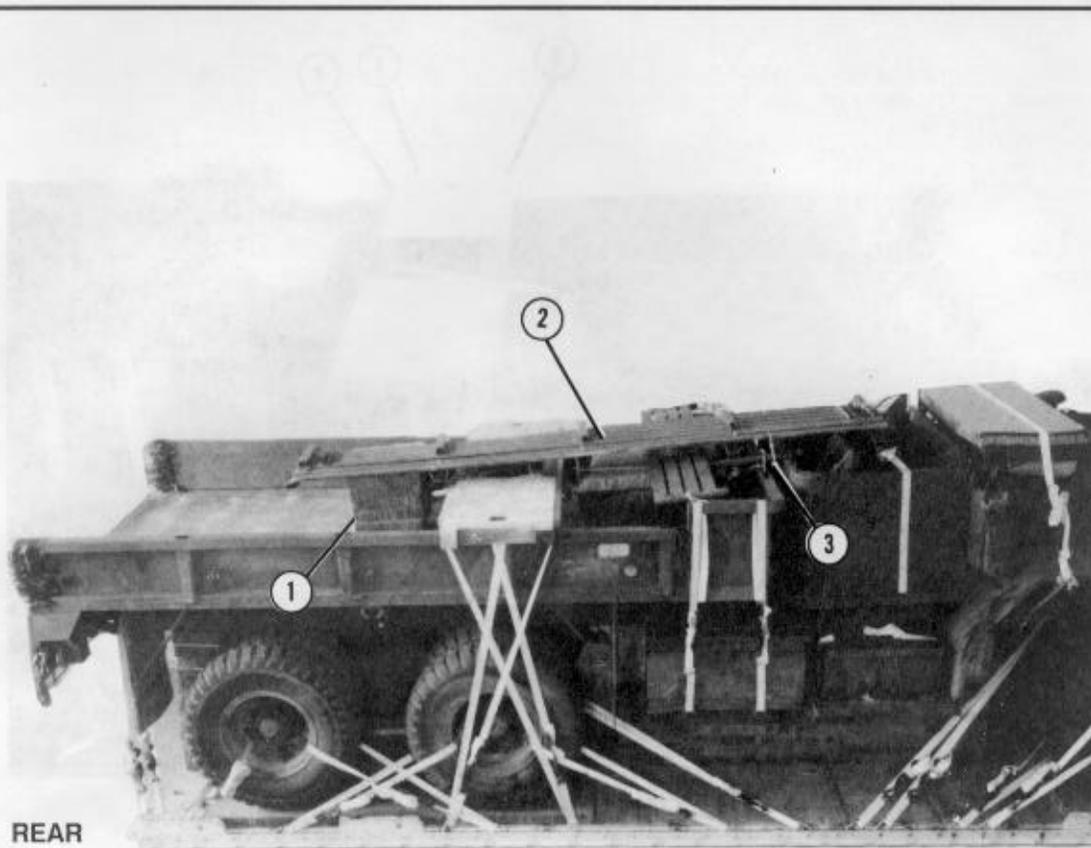


- ① Place the rear suspension sling spreader across the body of the truck over the front dual wheels.
- ② Pass the free end of a 15-foot tiedown strap through clevis 14, through the 4-inch cutout, and over the front edge of the sling spreader. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③ Pass the free end of a 15-foot tiedown strap through clevis 12, through the 4-inch cutout, and over the rear edge of the sling spreader. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ④ Install a 15-foot tiedown strap on the left front of the sling spreader using clevis 14A and adapting the procedures in step 2 above.
- ⑤ Install a 15-foot tiedown strap on the left rear of the sling spreader using clevis 12A and adapting the procedures in step 3 above.

Figure 5-30. Rear suspension sling spreader installed

5-12. Stowing Body Side Racks

Stow the body side racks as shown in Figure 5-31.



- ① Build a honeycomb stack using six 18- by 18-inch pieces of honeycomb. Center the honeycomb stack in the body of the truck 8 inches to the rear of the suspension sling spreader.
- ② Center the body side racks on the 18- by 18-inch honeycomb stack and the truck cab. Make sure the ends of the body side racks are slightly to the rear of the steering wheel.
- ③ Tie the body side racks in place with type III nylon cord.

Figure 5-31. Body side racks stowed

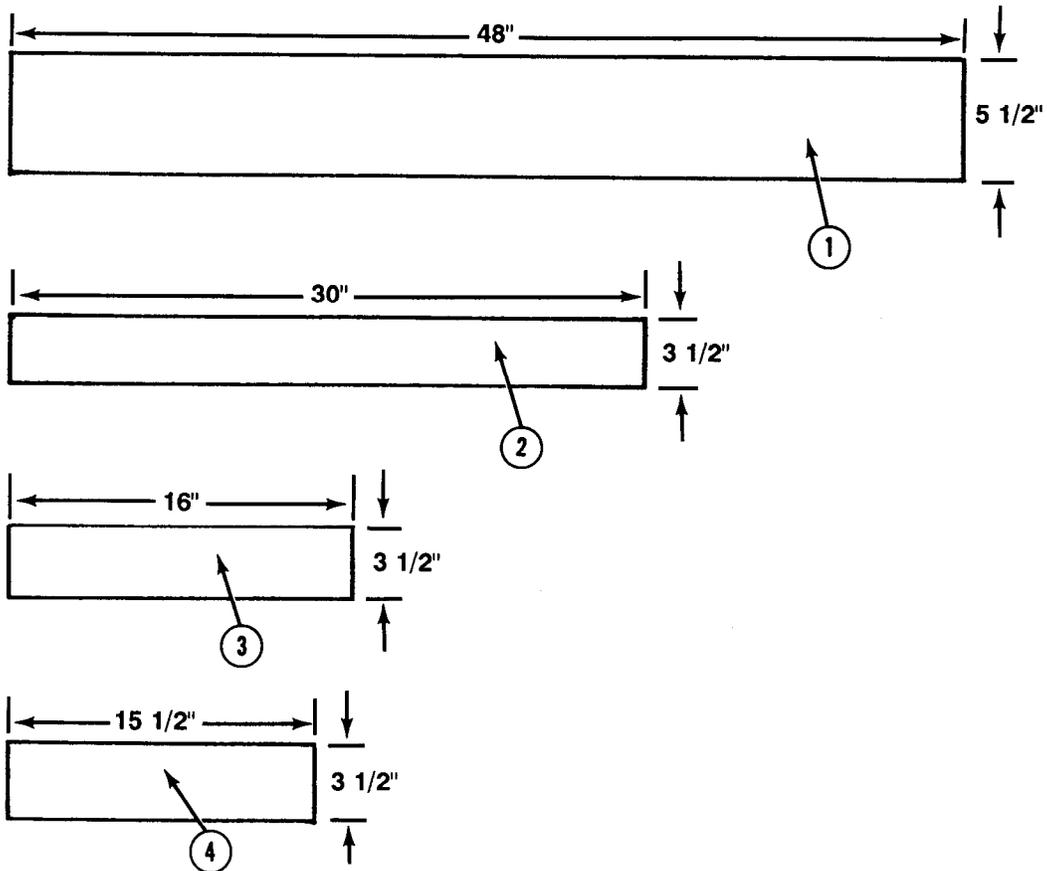
5-13. Constructing and Installing Front Suspension Sling Spreaders

Construct and install the front suspension sling spreaders as described below.

b. Install the front suspension sling spreaders as shown in Figures 5-36 and 5-37.

a. Construct the front suspension sling spreaders as shown in Figures 5-32 through 5-35.

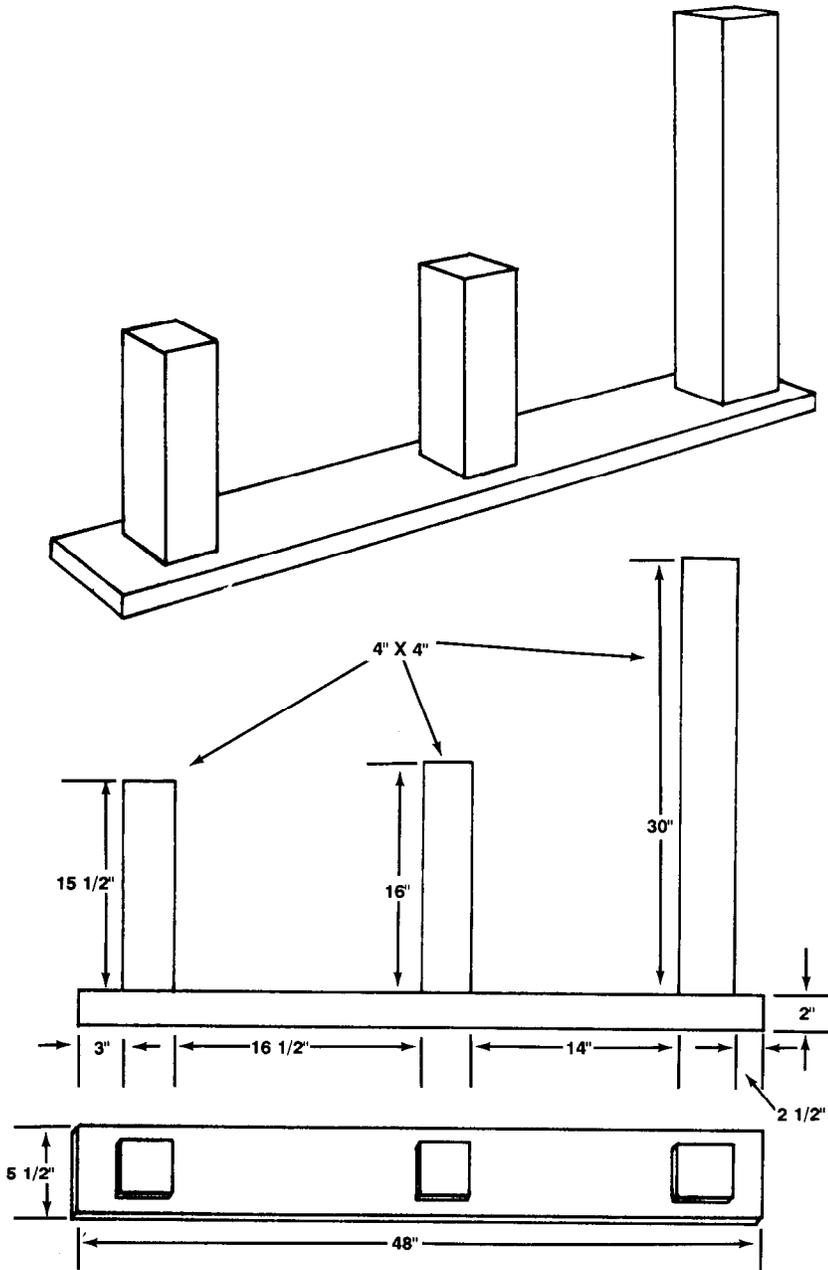
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	5 1/2 (actual)	48	2- by 6-inch lumber
2	1	3 1/2 (actual)	30	4- by 4-inch lumber
3	1	3 1/2 (actual)	16	4- by 4-inch lumber
4	1	3 1/2 (actual)	15 1/2	4- by 4-inch lumber

Figure 5-32. Material required for the right front suspension sling spreader

Note: These drawings are not drawn to scale.

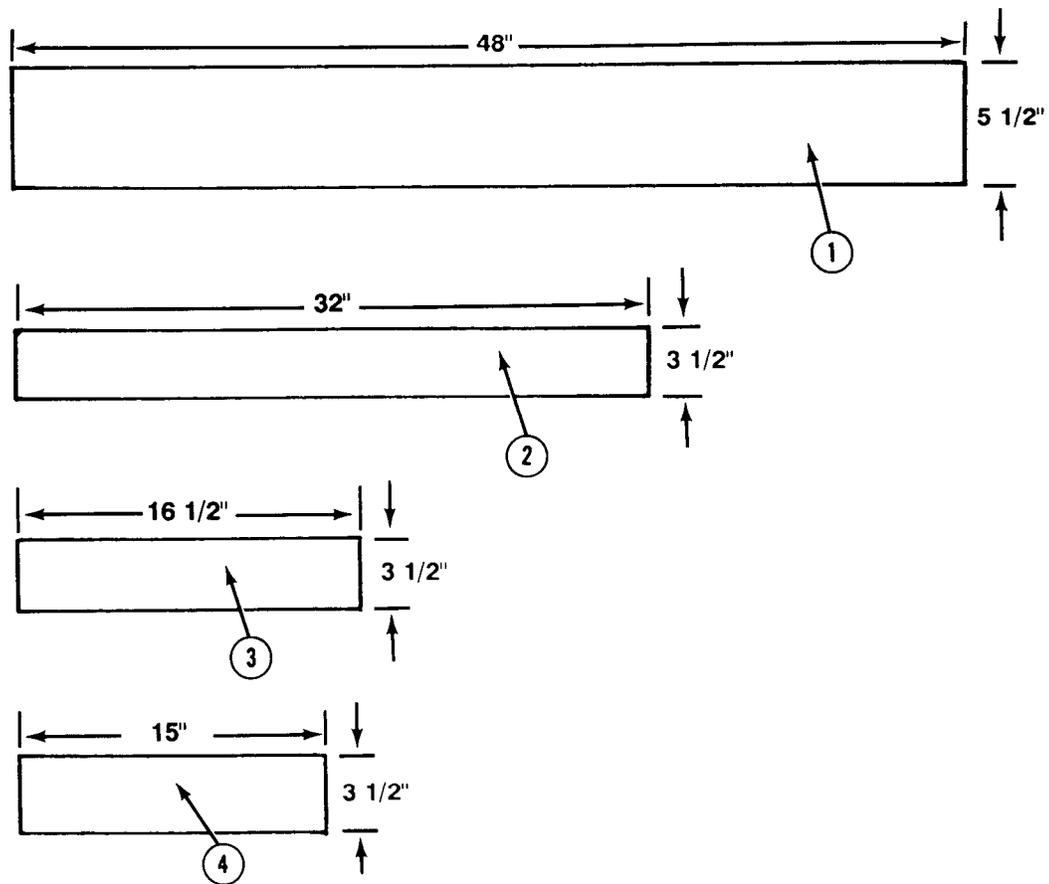


Step:

1. Construct a right front suspension sling spreader as shown.
2. Secure the lumber in place, as shown, with sixteen-penny nails.

Figure 5-33. Right front suspension sling spreader constructed

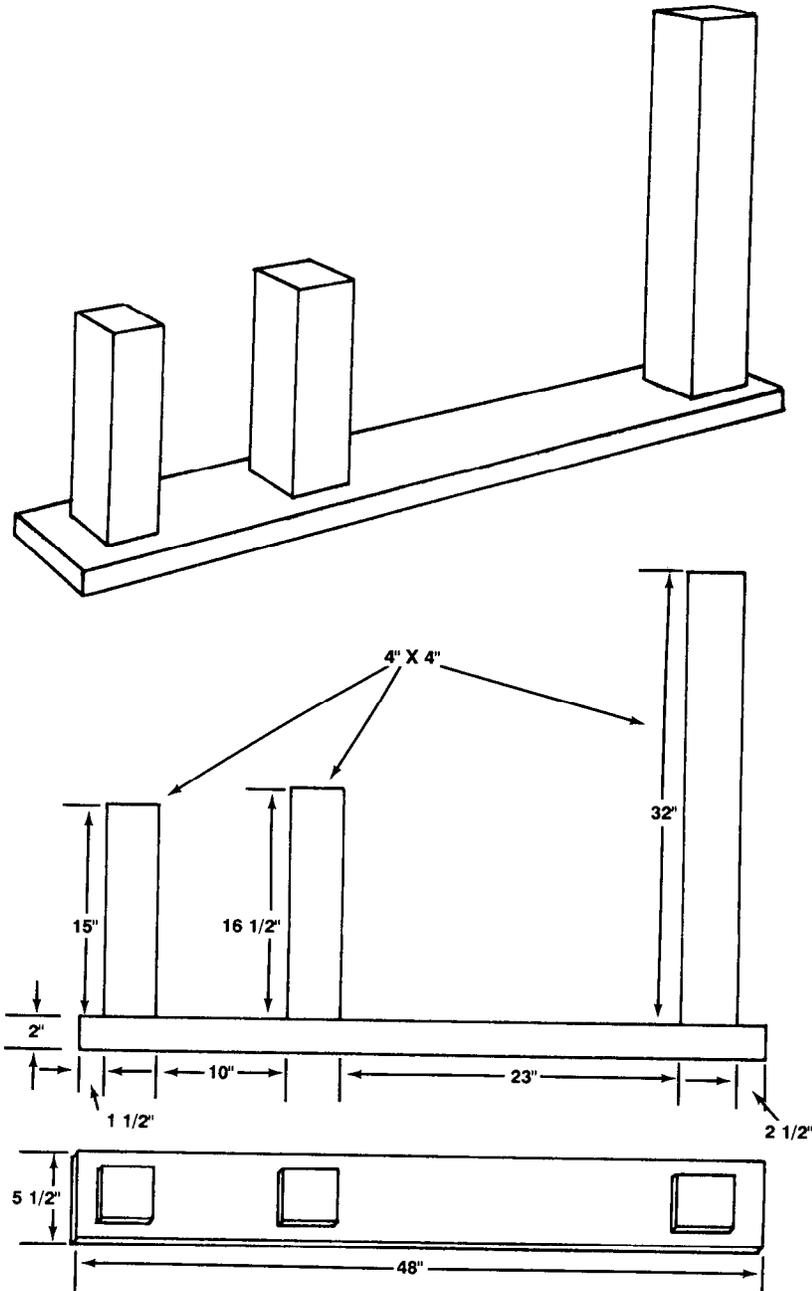
- Notes:**
- a. These drawings are not drawn to scale.
 - b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	5 1/2 (actual)	48	2- by 6-inch lumber
2	1	3 1/2 (actual)	32	4- by 4-inch lumber
3	1	3 1/2 (actual)	16 1/2	4- by 4-inch lumber
4	1	3 1/2 (actual)	15	4- by 4-inch lumber

Figure 5-34. Material required for the left front suspension sling spreader

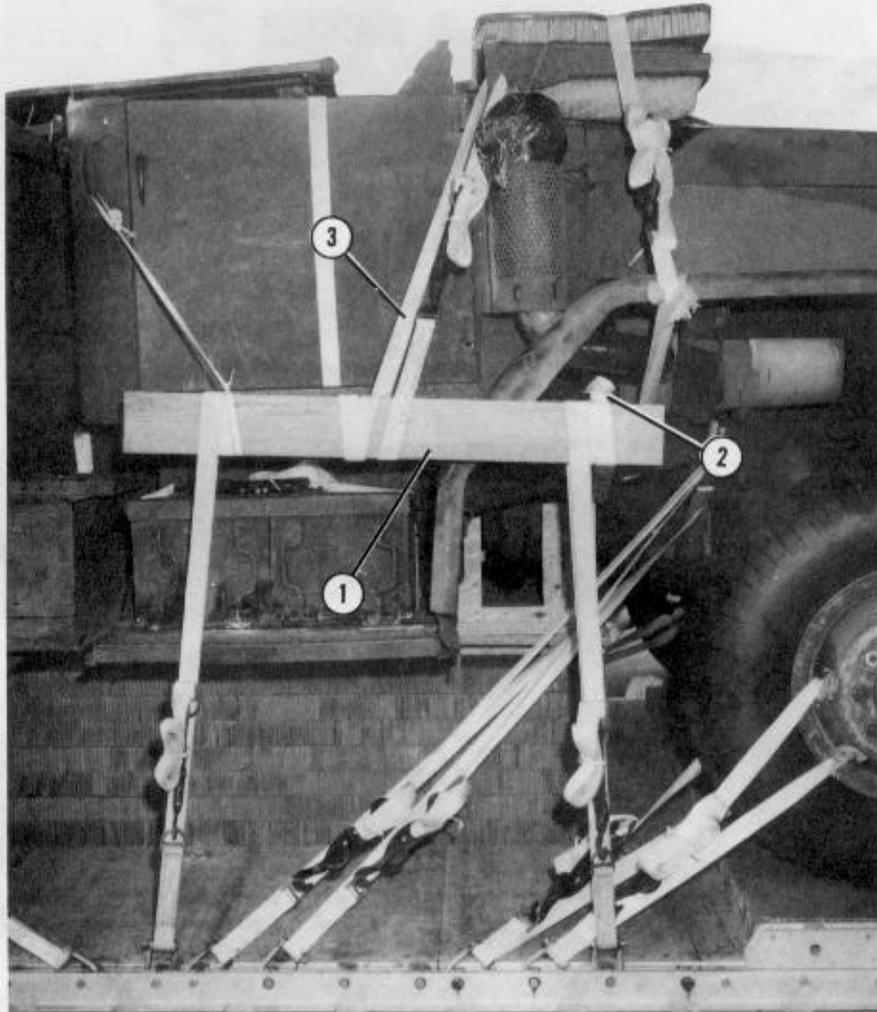
Note: These drawings are not drawn to scale.



Step:

1. Construct a left front suspension sling spreader as shown.
2. Secure the lumber in place, as shown, with sixteen-penny nails.

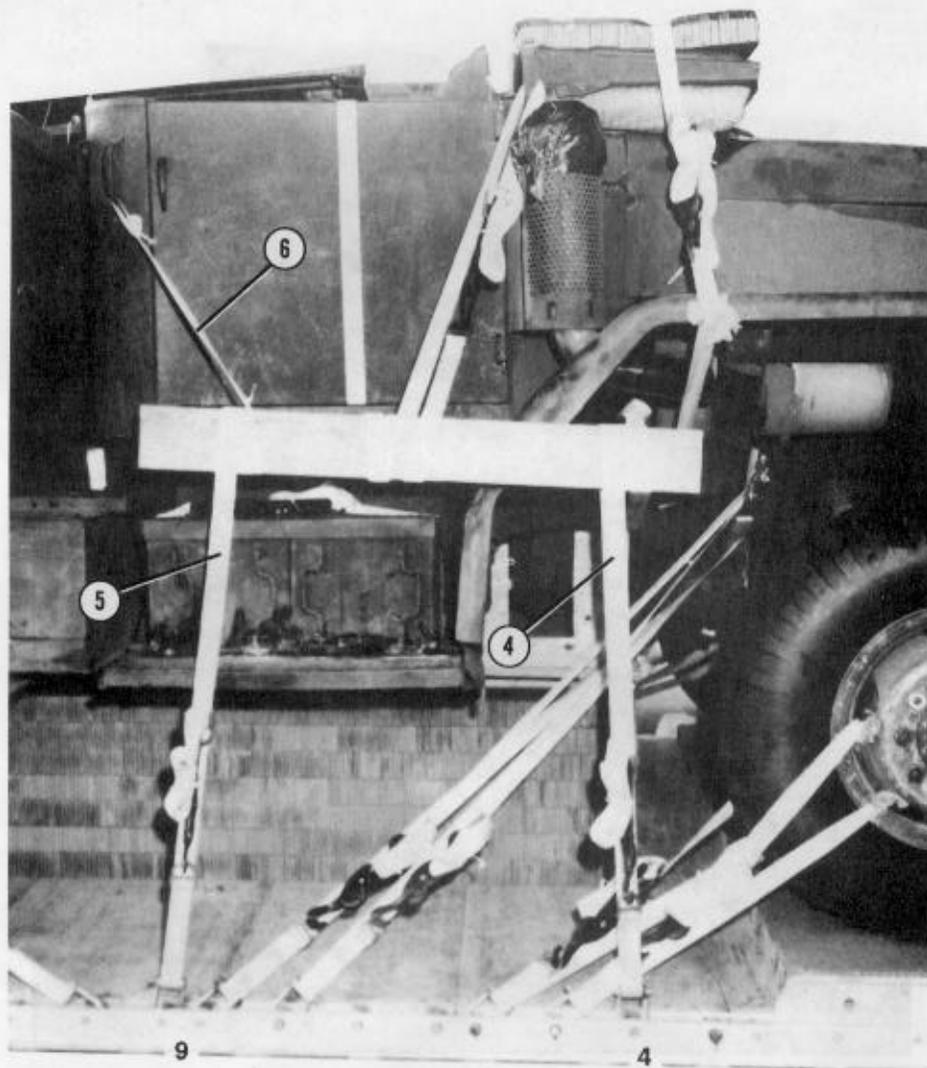
Figure 5-35. Left front suspension sling spreader constructed



RIGHT

- ① Position the right front suspension sling spreader against the truck as shown.
- ② Pass the end of a 15-foot tiedown strap around the front end of the 2- by 6- by 48-inch portion of the right suspension sling spreader. Pass the end of the strap around the mainframe rail. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③ Pass the end of a 15-foot tiedown strap around the right suspension sling spreader. Pass the end of the strap around the windshield frame support. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

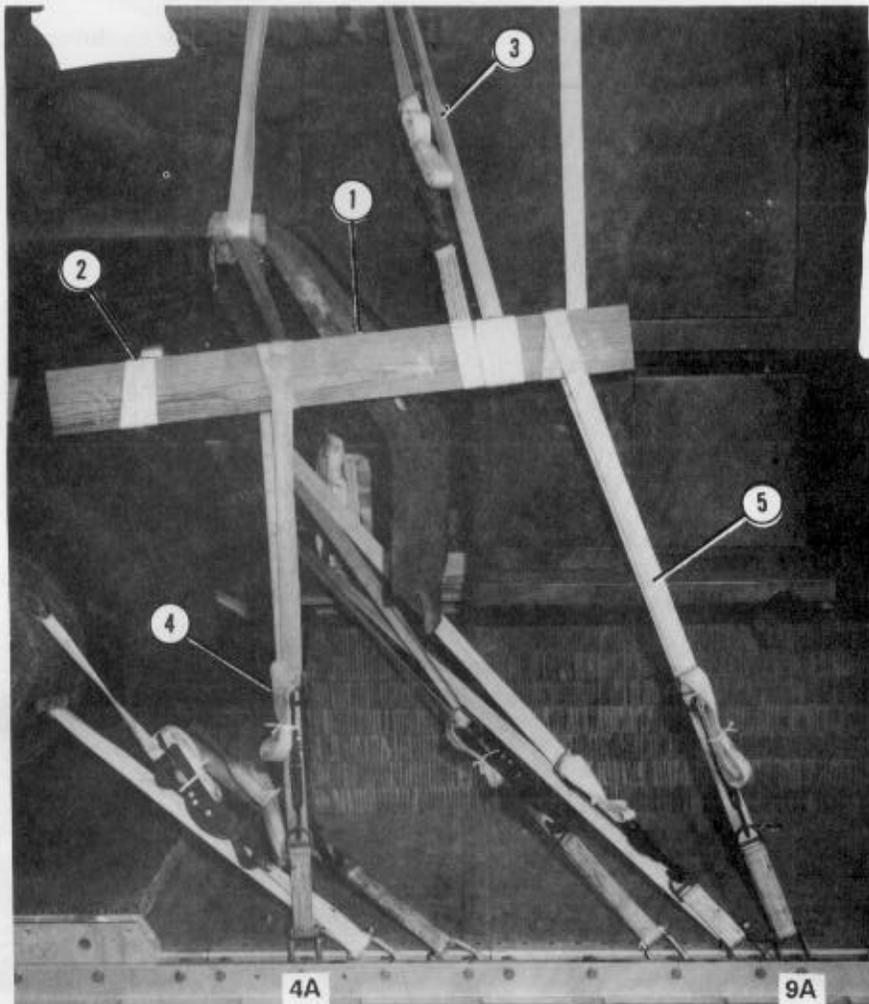
Figure 5-36. Right front suspension sling spreader installed



RIGHT

- ④ Pass the end of a 15-foot tiedown strap around the front of the right suspension sling spreader and through clevis 4. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑤ Pass the end of a 15-foot tiedown strap around the rear of the right suspension sling spreader and through clevis 9. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑥ Safety the rear of the right suspension sling spreader to the handhold handle with 1/2-inch tubular nylon webbing.

Figure 5-36. Right front suspension sling spreader installed (continued)



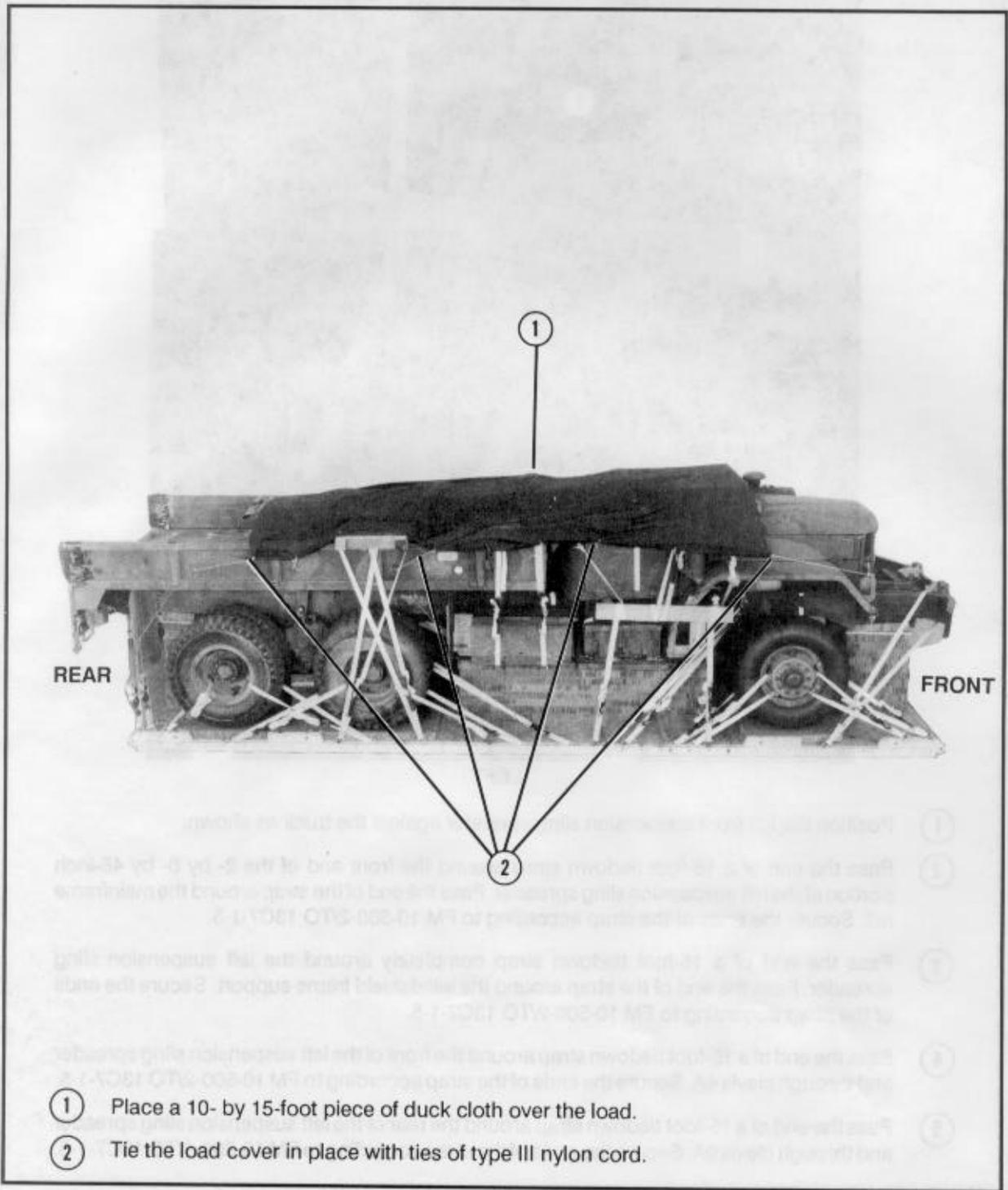
LEFT

- ① Position the left front suspension sling spreader against the truck as shown.
- ② Pass the end of a 15-foot tiedown strap around the front end of the 2- by 6- by 48-inch portion of the left suspension sling spreader. Pass the end of the strap around the mainframe rail. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③ Pass the end of a 15-foot tiedown strap completely around the left suspension sling spreader. Pass the end of the strap around the windshield frame support. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ④ Pass the end of a 15-foot tiedown strap around the front of the left suspension sling spreader and through clevis 4A. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑤ Pass the end of a 15-foot tiedown strap around the rear of the left suspension sling spreader and through clevis 9A. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 5-37. Left front suspension sling spreader installed

5-14. Installing Load Cover

Install the load cover as shown in Figure 5-38.

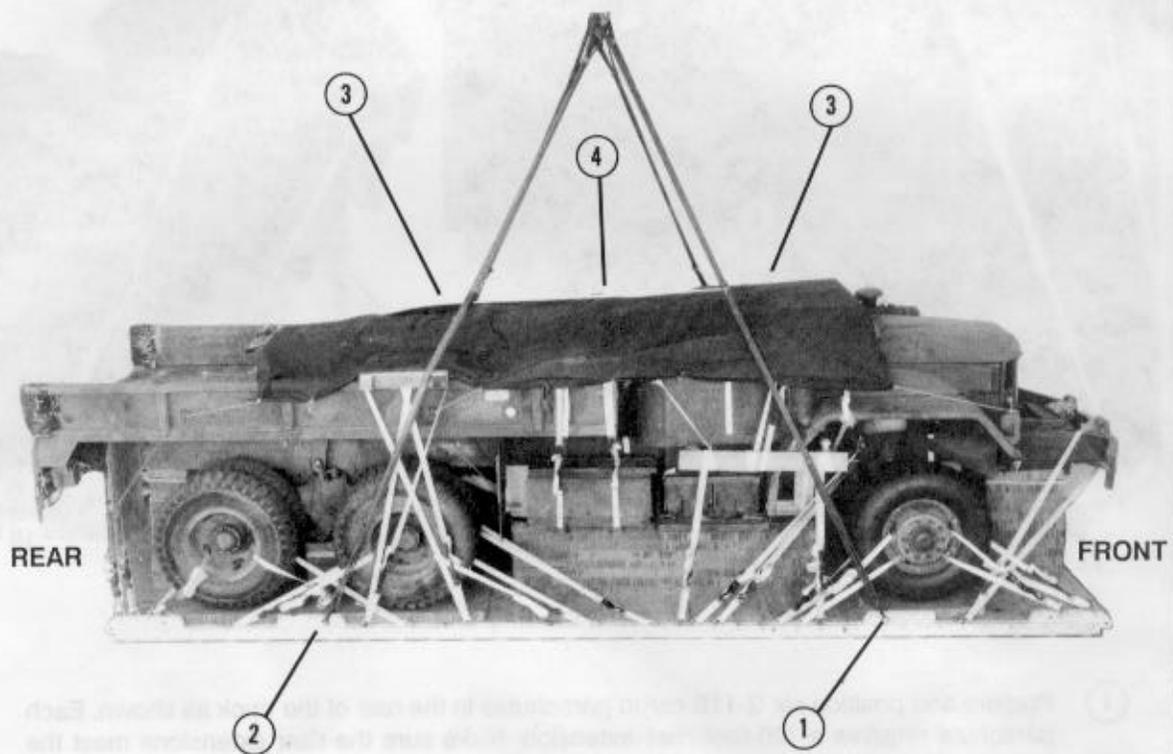


- ① Place a 10- by 15-foot piece of duck cloth over the load.
- ② Tie the load cover in place with ties of type III nylon cord.

Figure 5-38. Load cover installed

5-15. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and deadman's tie as shown in Figure 5-39.

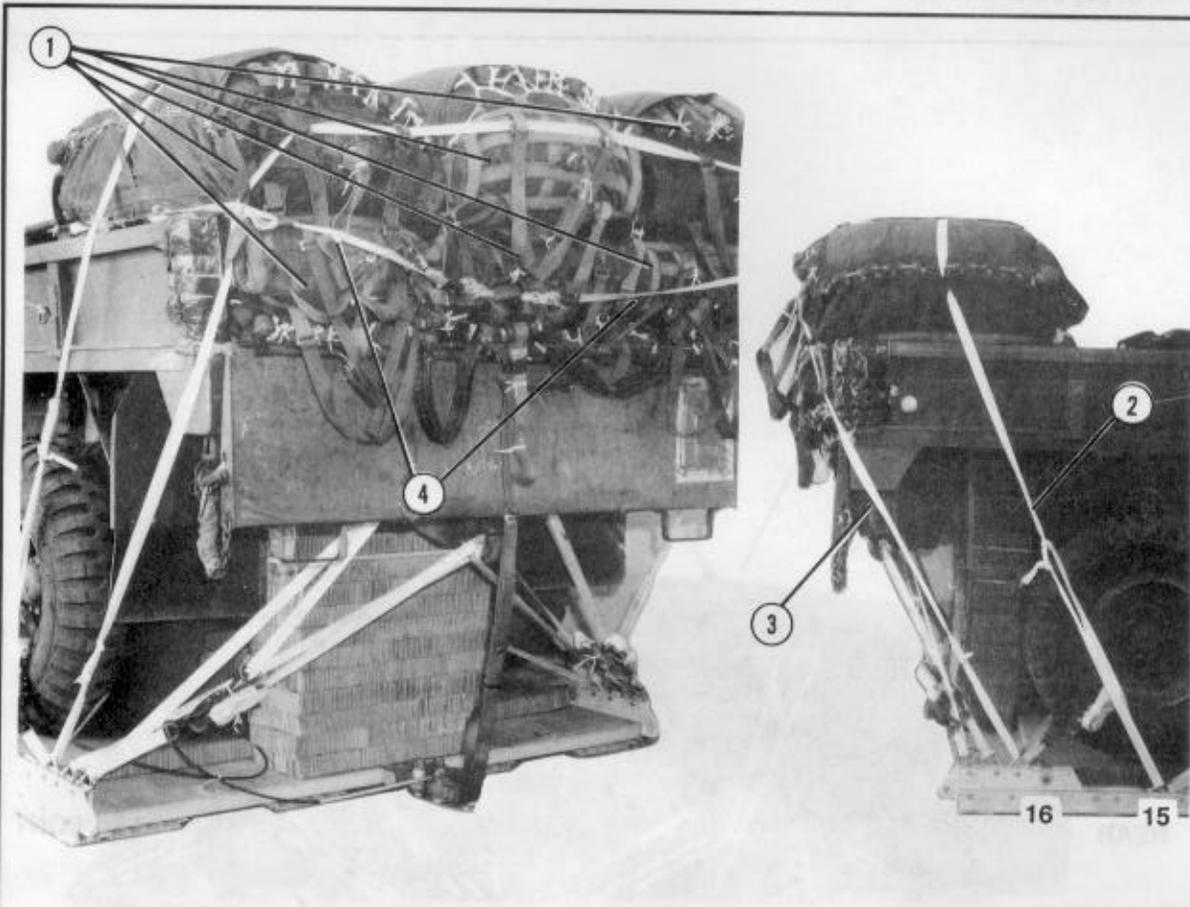


- ① Place the bell portion of a large suspension clevis on the end of a 16-foot (4-loop), type XXVI nylon webbing sling. Bolt the clevis to the right front suspension link.
- ② Install a 16-foot (4-loop), type XXVI nylon webbing sling on the right rear suspension link as described in step 1 above.
- ③ Install a 16-foot (4-loop), type XXVI nylon webbing sling on the left front and left rear suspension links by adapting the procedures in steps 1 and 2 above.
- ④ Install a deadman's tie on the slings according to FM 10-500-2/TO 13C7-1-5.

Figure 5-39. Suspension slings and deadman's tie installed

5-16. Stowing Cargo Parachutes

Stow six G-11B cargo parachutes on the truck as shown in Figure 5-40.

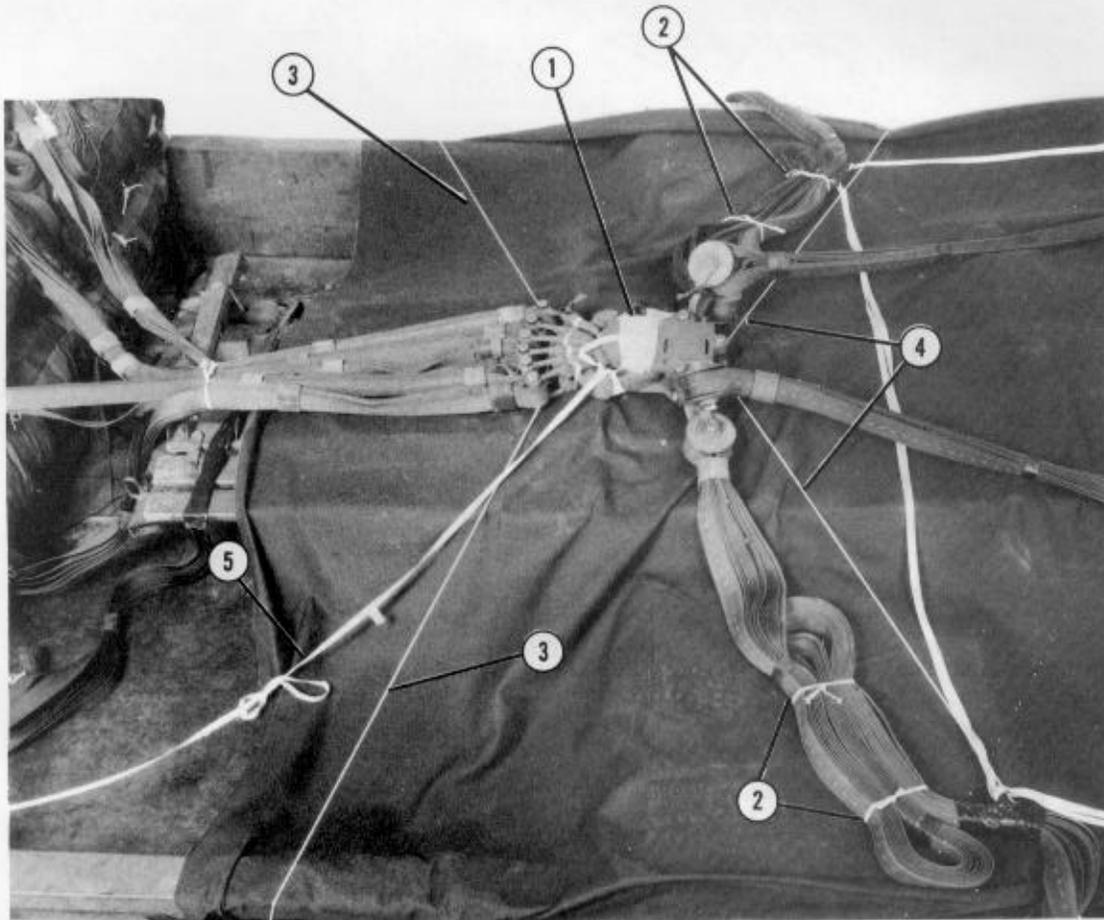


- ① Prepare and position six G-11B cargo parachutes in the rear of the truck as shown. Each parachute requires a 120-foot riser extension. Make sure the riser extensions meet the requirements and restrictions in FM 10-500-2/TO 13C7-1-5.
- ② Bolt a load tiedown clevis to clevises 15 and 15A in an inverted manner. Install a 10-yard, type X nylon webbing parachute restraint strap over the center of the cargo parachutes. Use a D-ring and a load binder to secure each end of the strap to the inverted clevises according to FM 10-500-2/TO 13C7-1-5.
- ③ Bolt a load tiedown clevis to clevises 16 and 16A in an inverted manner. Install a 10-yard, type X nylon webbing parachute restraint strap over the top of the cargo parachutes. Use a D-ring and a load binder to secure each end of the strap to the inverted clevises according to FM 10-500-2/TO 13C7-1-5.
- ④ Install two multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

Figure 5-40. Six G-11B cargo parachutes installed

5-17. Installing Release System

Prepare and install the release system as shown in Figure 5-41.

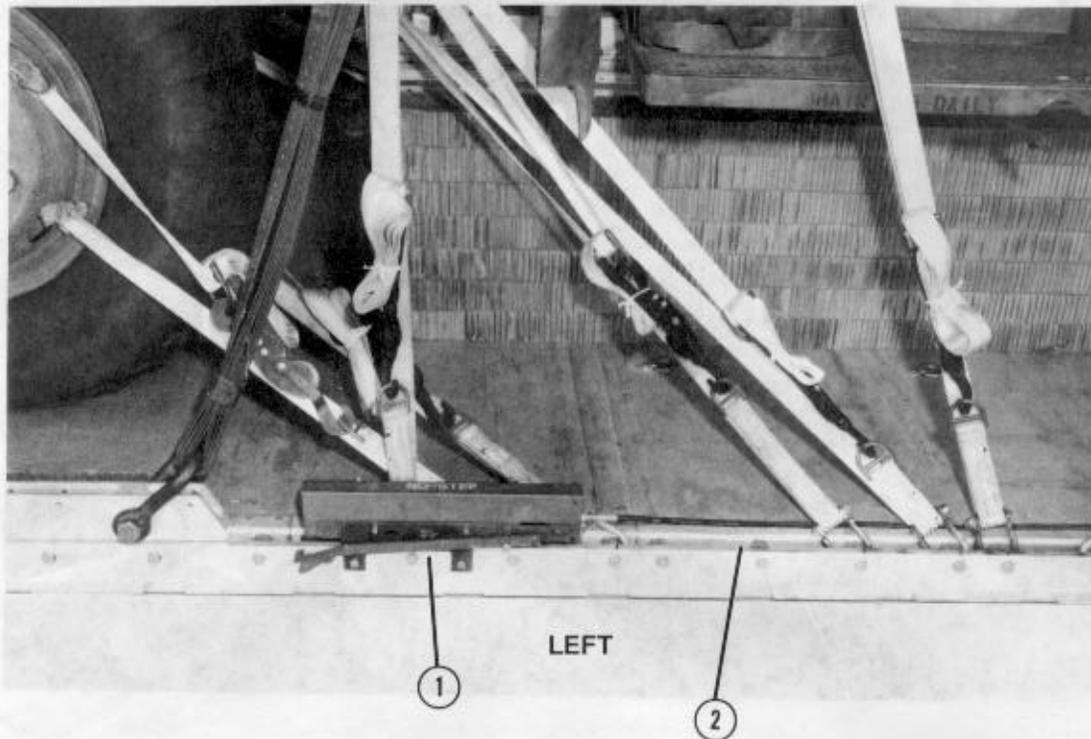


- ① Prepare an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Attach the release assembly to the suspension slings and the cargo parachutes according to FM 10-500-2/TO 13C7-1-5. Center the release assembly on the top of the load.
- ② Fold the suspension slings, and secure the folds with single turns of type I, 1/4-inch cotton webbing.
- ③ Secure the top of the release assembly according to FM 10-500-2/TO 13C7-1-5.
- ④ Secure the bottom of the release assembly according to FM 10-500-2/TO 13C7-1-5.
- ⑤ Install the arming lanyard according to FM 10-500-2/TO 13C7-1-5.

Figure 5-41. Release system installed

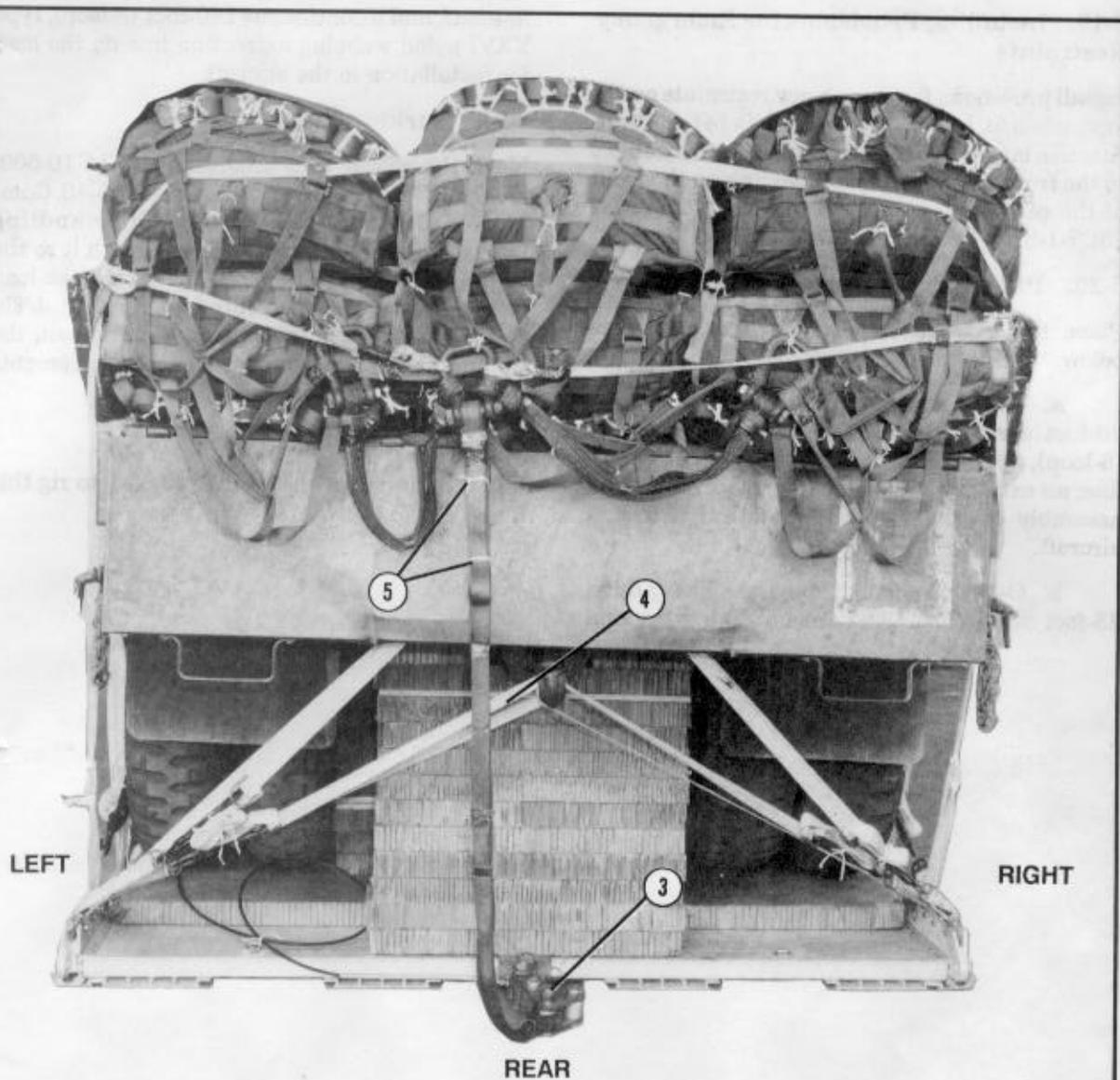
5-18. Installing Extraction System

Install the EFTC extraction system as shown in Figure 5-42.



- ① Attach the type V EFTA mounting brackets to the rear mounting holes in the left platform rail.
- ② Install the actuator with a 24-foot cable to the EFTA mounting brackets according to FM 10-500-2/TO 13C7-1-5.

Figure 5-42. Extraction system installed.



- ③ Use a 5-inch latch assembly adapter, and attach the latch assembly to the extraction bracket according to FM 10-500-2/TO 13C7-1-5. Make sure the locking nut hole faces toward the left side of the platform.
- ④ Connect one end of a 9-foot (2-loop), type XXVI nylon webbing sling (deployment line) to the top spacer of the link assembly. Connect the free end to the center large suspension clevis on the 3-foot clustering slings.
- ⑤ Fold the excess deployment line, and secure the folds in place with tape or type I, 1/4-inch cotton webbing.

Figure 5-42. Extraction system installed (continued)

5-19. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints on the load when it is dropped from a C-141 aircraft. Attach a large (1-inch) suspension clevis assembly to the front hole of each tandem link on the front of the platform as outlined in FM 10-500-2/TO 13C7-1-5.

5-20. Placing Extraction Parachutes

Place the extraction parachutes as described below.

a. C-130 Aircraft. Place two heavy-duty, 28-foot cargo extraction parachutes; a 60-foot (6-loop), type XXVI nylon webbing extraction line; an extraction line leaf; and a four-point link assembly on the load for installation in the aircraft.

b. C-141 Aircraft. Place one heavy-duty, 28-foot cargo extraction parachute, an extraction

line leaf, and a continuous 140-foot (3-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

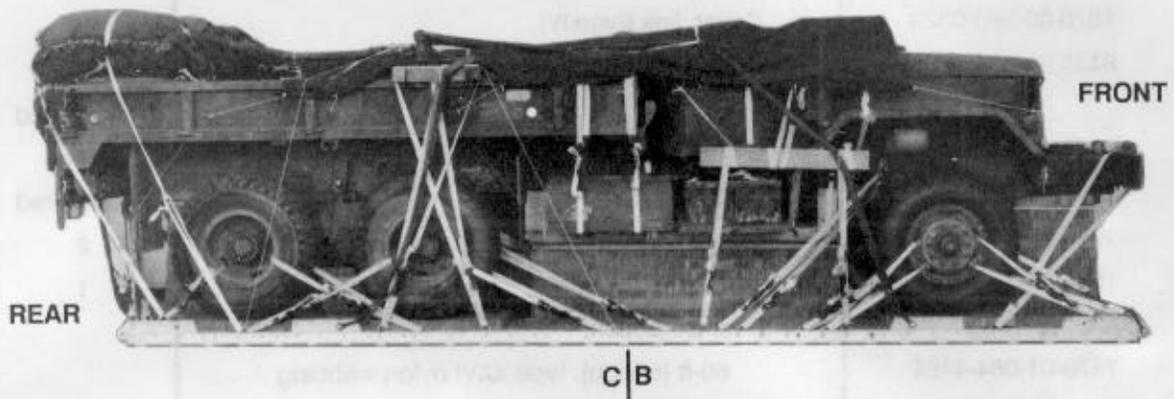
5-21. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 5-43. Complete DD Form 1387-2 (Special Handling Data/Certification), and securely attach it to the load. Indicate on DD Form 1387-2 that the load has 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.

5-22. Equipment Required

Use the equipment listed in Table 5-1 to rig this load.

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



RIGGED LOAD DATA

Weight: Load shown	26,840 pounds
Maximum load allowed	27,340 pounds
Height	98 inches
Width	108 inches
Length	326 inches
Overhang: Front	10 inches
Rear	28 inches
CB (from front edge of platform)	160 inches
Extraction System	EFTC

Figure 5-43. M813, 5-ton cargo truck rigged for low-velocity airdrop on a type V platform

Table 5-1. Equipment required for rigging the M813 or M54, 5-ton cargo truck for low-velocity airdrop on a type V platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
3990-00-937-0272	Binder, load, 10,000-lb	42
1670-01-020-2013	Bracket, suspension, rear	2
4030-00-678-5354	Clevis, suspension, 1-in (large)	15
8305-00-242-3593	Cloth, cotton duck, 60-in	1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5787	Coupling, airdrop, extraction force transfer w 20-ft cable	1
1670-00-360-0328	Cover, clevis, large	6
1670-00-360-0329	Cover, link (type IV)	19
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	44
8305-00-958-3685	Felt, 1/2-in thick	As required
1670-00-573-6790	Frame extension assembly	2
1670-01-183-2678	Leaf, extraction line	1
	Line, extraction:	
1670-01-064-4454	60-ft (6-loop), type XXVI nylon webbing (for C-130 aircraft)	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141 aircraft)	1
	Link assembly:	
1670-00-006-2752	Four-point	1
	Two-point:	1
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(2)
5310-00-232-5165	Nut, 1-in	(2)
1670-00-003-1954	Plate, side, 5 1/2-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV (Add one assembly for C-130 aircraft if a 28-ft extraction parachute, NSN 1670-00-040-8135, is used.)	1

Table 5-1. Equipment required for rigging the M813 or M54, 5-ton cargo truck for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
	Load spreader:	
5510-00-220-6146	Lumber, 2- by 4- by 88-in	2
5510-00-220-6274	Lumber, 4- by 4-in:	
	17-in	2
	108-in	2
5530-00-128-4981	Plywood, 3/4- by 24- by 42-in	2
5510-00-220-6146	Lumber, 2- by 4- by 96-in	2
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	35 sheets
	9- by 18-in	(8)
	12- by 12-in	(4)
	16- by 18-in	(2)
	18- by 18-in	(6)
	24- by 18-in	(2)
	24- by 60-in	(1)
	25- by 18-in	(2)
	25- by 24-in	(1)
	27- by 24-in	(2)
	36- by 12-in	(11)
	36- by 24-in	(13)
	36- by 36-in	(2)
	45- by 18-in	(8)
	45- by 24-in	(4)
	54- by 18-in	(4)
	96- by 36-in	(10)
1670-01-016-7841	Parachute, Cargo, G-11B	6
	Cargo extraction:	
1670-00-262-1797	28-ft or	2
1670-00-040-8135	28-ft, heavy-duty	2
	Platform, AD, type V, 24-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)

Table 5-1. Equipment required for rigging the M813 or M54, 5-ton cargo truck for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis, load tiedown	(36)
1670-01-162-2376	Extraction bracket assembly	(1)
1670-01-247-2389	Suspension link	(4)
1670-01-162-2381	Tandem link	(4)
5530-00-128-4981	Plywood, 3/4- by 48- by 96-in:	5 sheets
	4- by 96-in	(4)
	12- by 12-in	(2)
	36- by 12-in	(1)
	36- by 24-in	(1)
	36- by 96-in	(1)
	45- by 18-in	(4)
	45- by 24-in	(2)
	54- by 18-in	(1)
1670-01-097-8817	Release, cargo parachute, M-2	1
	Sling, cargo, airdrop:	
	For deployment line:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	1
	For lifting:	
1670-00-432-2506	12-ft (4-loop), type XXVI nylon webbing	2
1670-00-432-2507	16-ft (4-loop), type XXVI nylon webbing	4
	For riser extensions:	
1670-01-062-6311	120-ft (2-loop), type XXVI nylon webbing	6
	Sling spreader:	
5510-00-220-6448	Lumber, 2- by 6- by 48-inch	2
5510-00-220-6274	Lumber, 4- by 4-in:	
	15-in	1
	15 1/2-in	1
	16-in	1
	16 1/2-in	1
	30-in	1
	32-in	1

Table 5-1. Equipment required for rigging the M813 or M54, 5-ton cargo truck for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
1670-00-040-8219	Strap, parachute release, multicut, comes w 3 knives (Use only 2 knives on each line.)	2
	Support, mainframe:	1
	Lumber:	
5510-00-220-6146	2- by 4- by 9 3/4-in	(2)
5510-00-220-6448	2- by 6- by 33 1/4-in	(3)
5510-00-220-6274	4- by 4- by 33 3/4-in	(1)
	Nail, steel wire, common:	
5315-00-010-4659	8d	As required
5315-00-010-4663	16d	As required
5530-00-128-4981	Plywood, 3/4- by 48- by 96-in:	4 sheets
	12- by 12-in	(1)
	13- by 95-in	(6)
	18- by 60-in	(1)
	33 3/4- by 95-in	(2)
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	63
	Webbing:	
8305-00-268-2411	Cotton, type I, 1/4-inch	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in	As required
8305-00-261-8584	Type X, treated	As required