CHAPTER 9

RIGGING M929, 5-TON DUMP TRUCK ON A TYPE V PLATFORM

Section I

RIGGING TRUCK FOR LOW-VELOCITY AIRDROP

9-1. Description of Load

The M929, 5-ton dump truck is rigged on a 28-foot, type V airdrop platform with six G-11B cargo parachutes and other items of airdrop equipment. The M929 truck weighs 24,250 pounds. Its height is 120 1/2 inches, reducible to 92 1/2 inches. The width of the truck is 95 inches. The length of the truck is 273 inches. This truck may be delivered by low-velocity airdrop from C-130 or C-141 aircraft. Figure 9-1 shows the unrigged M929 truck equipped with a bumper extension and a cab cover. 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.

Note: A bumper extension MUST be installed if there is no winch.

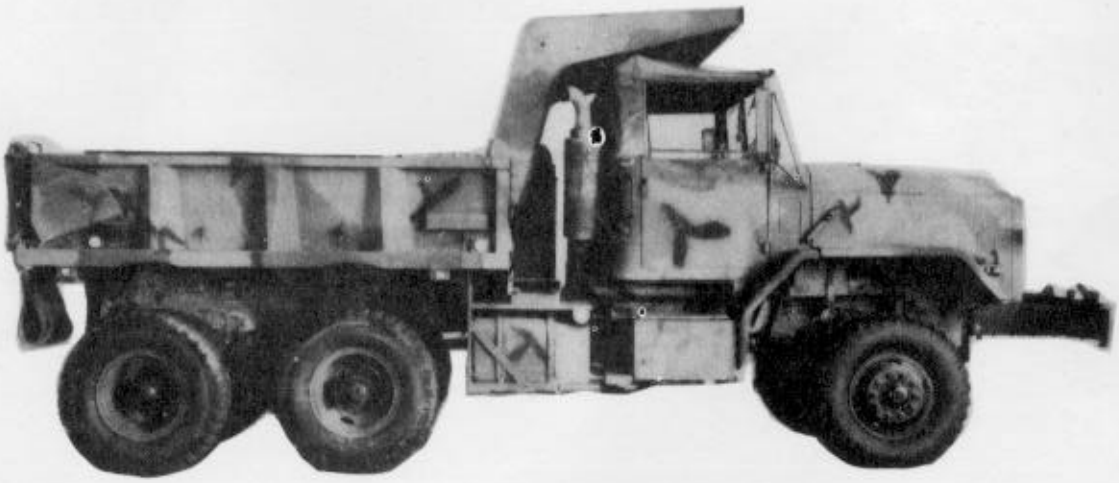


Figure 9-1. Right side of unrigged M929, 5-ton dump truck

9-2. Preparing Platform

Prepare a 28-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 as shown in Figure 9-2.

b. Installing Suspension Links. Install the suspension links as described in Figure 9-2.

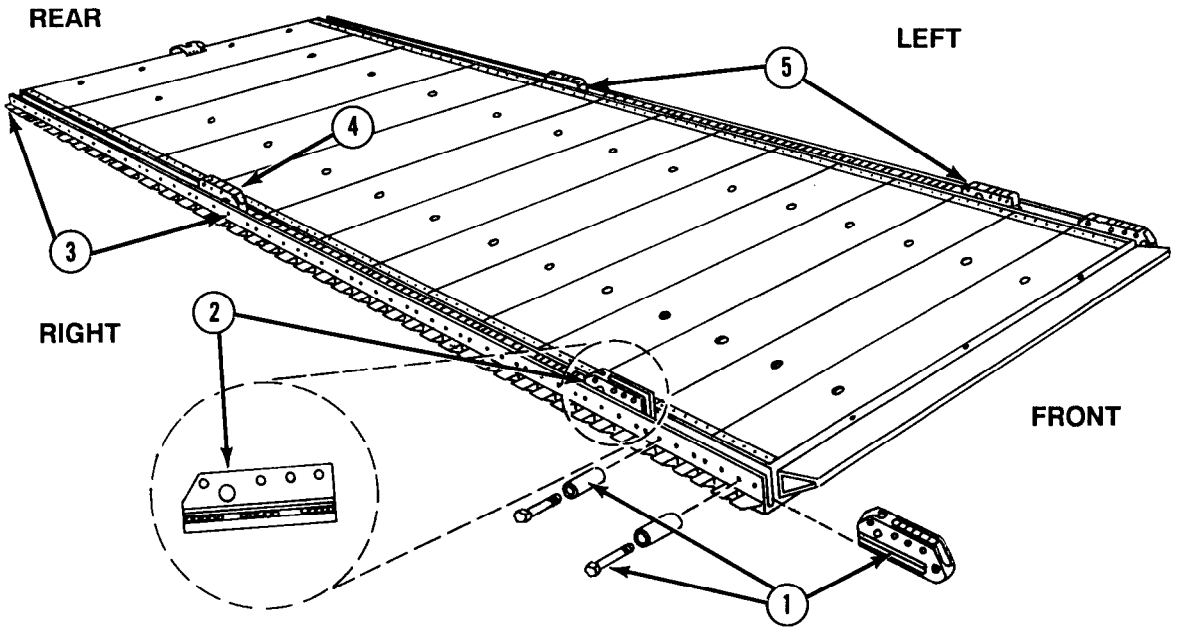
c. Installing Tandem Links. Install a tandem link on the front of each rail as shown in Figure 9-3.

d. Attaching and Numbering Clevises. Attach and number 50 clevises as shown in Figure 9-3.

e. Labeling and Numbering Tiedown Rings. Label and number the tiedown rings as shown in Figure 9-3.

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 bushings, bolts, and any tandem links that may have been installed in holes 1 through 11 on the right rail.

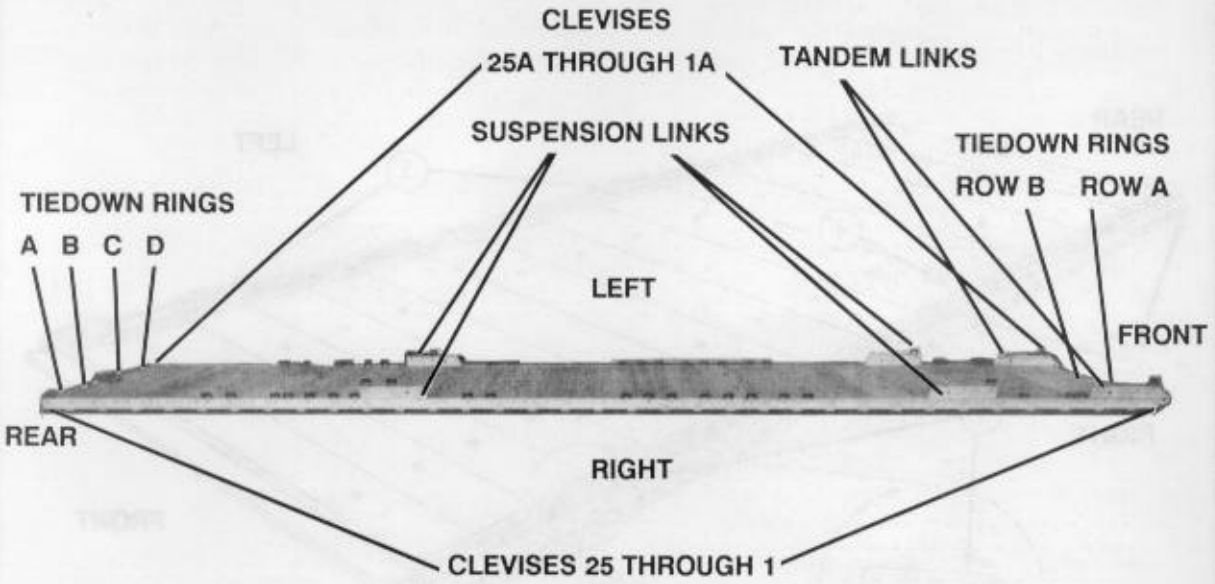
(2) Place a suspension link in the front of the right rail with the flat portion to the front of the rail. Slide the link along the rail until the holes in the link align with rail holes 9, 10, and 11. Bolt the link in place with the bushing bolts.

(3) Remove bushings, bolts, and any tandem links that may have been installed in holes 38 through 56 on the right rail.

(4) Place a suspension link in 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 9-2. 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 bushing 1 on each front tandem link.
3. Install a clevis on bushing 1 on each front suspension link.
4. Install a clevis on bushings 2 and 4 on each rear suspension link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 4, 5, 7, 18, 19, 21, 22, 23, 25, 26, 27, 34, 35, 41, 42, 43, 44, 45, 47, 48, and 56.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 25 and those bolted to the left side from 1A through 25A.
7. Label the two rows of tiedown rings in the first 13 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 tiedown rings 1 through 14.

Figure 9-3. Platform prepared

9-3. Building and Positioning Honeycomb Stacks

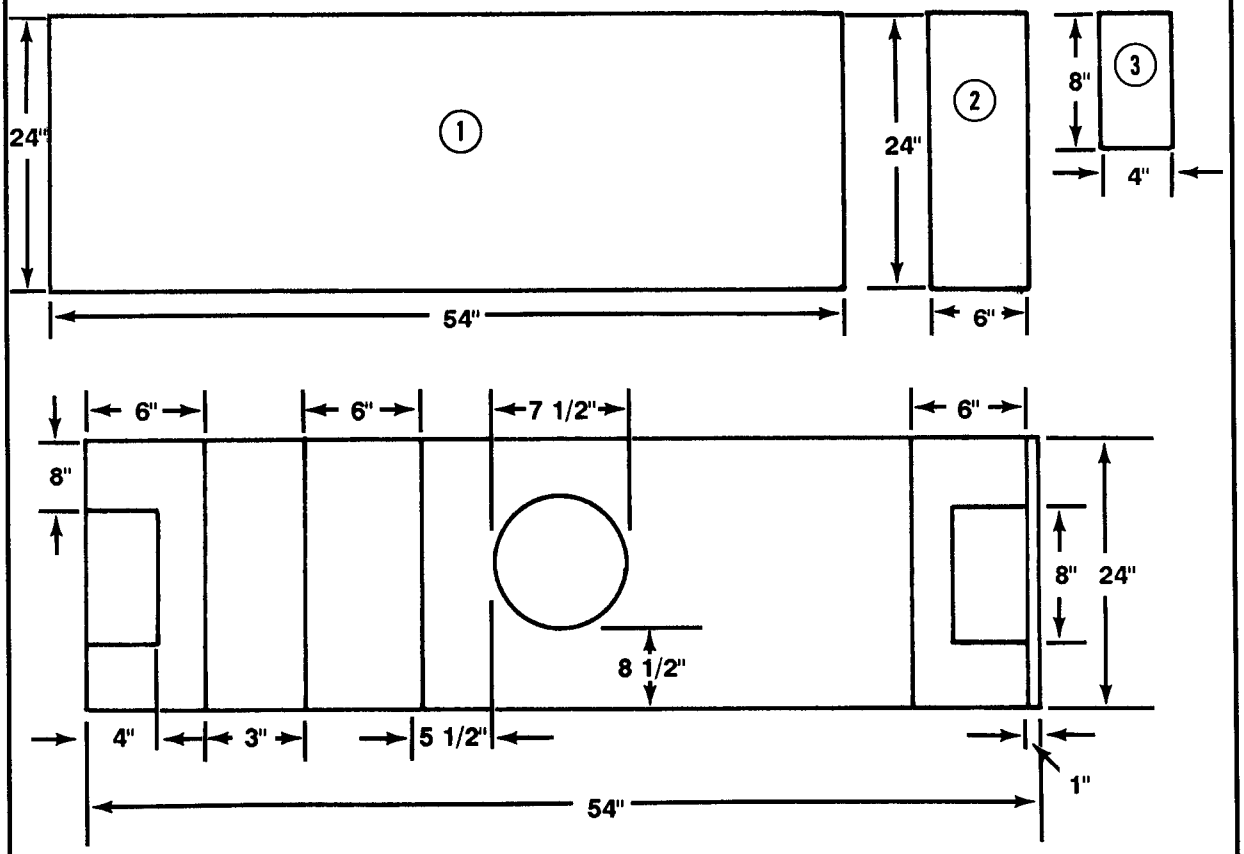
Build and position the honeycomb stacks as described below.

a. Build the load spreaders for the honeycomb stacks as described in Figures 9-4 through 9-11.

b. Build the honeycomb stacks as shown in Figures 9-12 through 9-17. Glue the layers of the honeycomb together. Do NOT glue the stacks to the platform.

c. Position the honeycomb stacks on the platform as shown in Figures 9-18 through 9-20.

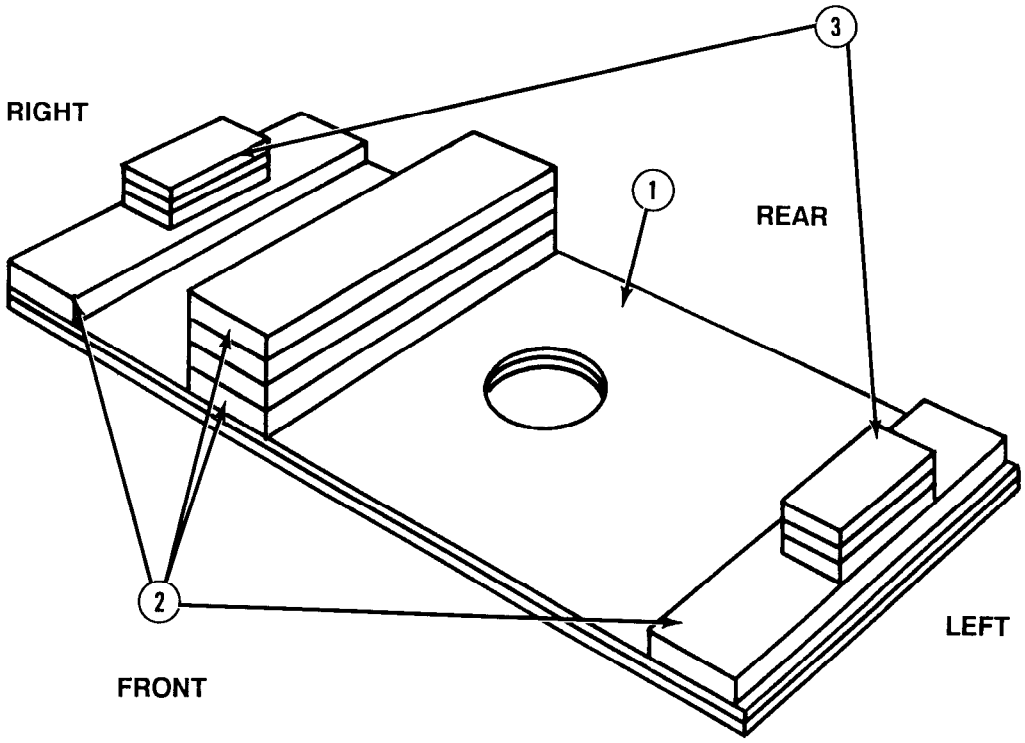
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	54	24	3/4-inch plywood
2	6	5 1/2 (actual)	24	2- by 6-inch lumber
3	6	3 1/2 (actual)	8	2- by 4-inch lumber

Figure 9-4. Material required for load spreader for honeycomb stack 2

Notes: a. This drawing is not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-4.

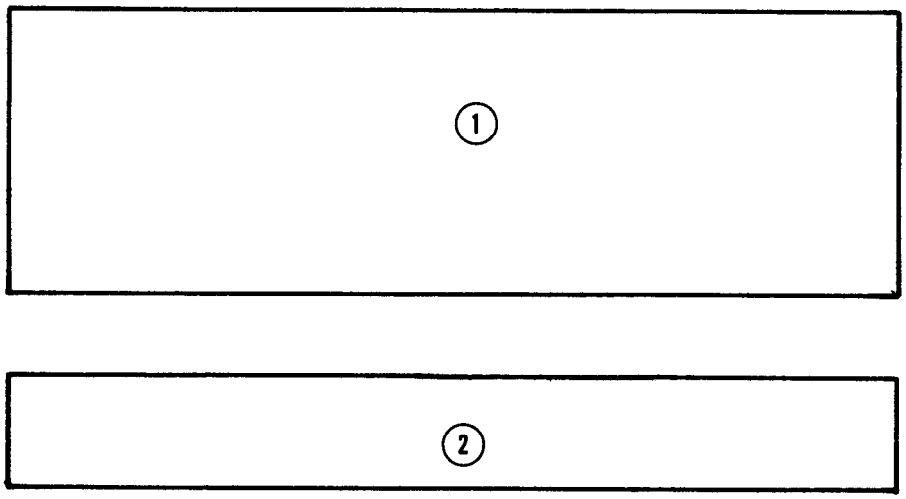


Step:

1. Construct the load spreader for honeycomb stack 2 as shown.
2. Secure the plywood and lumber in place, as shown, with sixteen-penny nails.

Figure 9-5. Load spreader for honeycomb stack 2 constructed

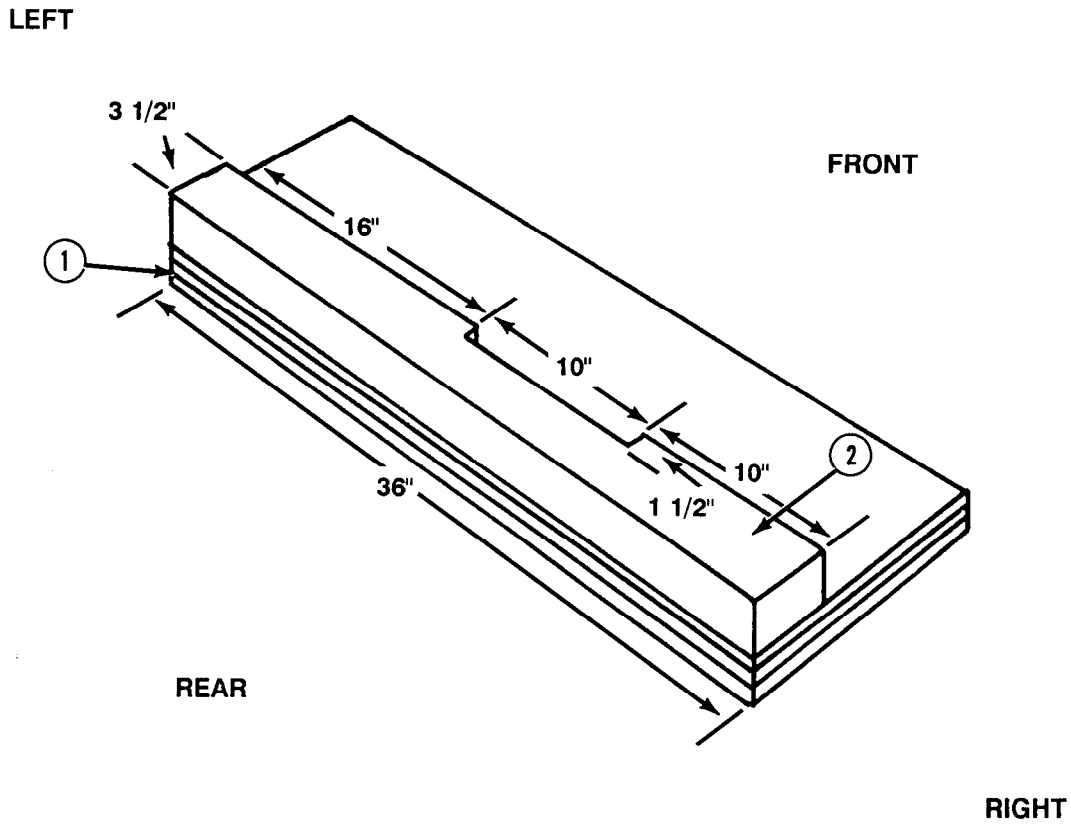
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	3	36	12	3/4-inch plywood
2	1	36	3 1/2 (actual)	2- by 4-inch lumber

Figure 9-6. Material required for load spreader for honeycomb stack 3

Notes: a. This drawing is not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-6.

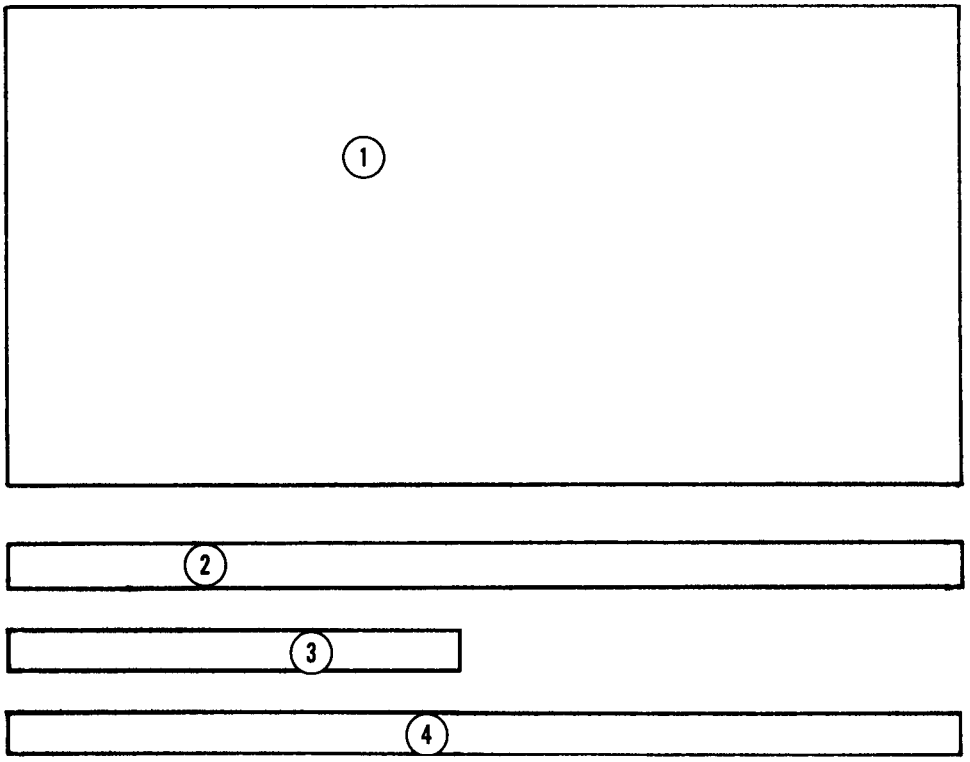


Step:

1. Construct the load spreader for honeycomb stack 3 as shown.
2. Secure the plywood and lumber in place, as shown, with eightpenny nails.

Figure 9-7. Load spreader for honeycomb stack 3 constructed

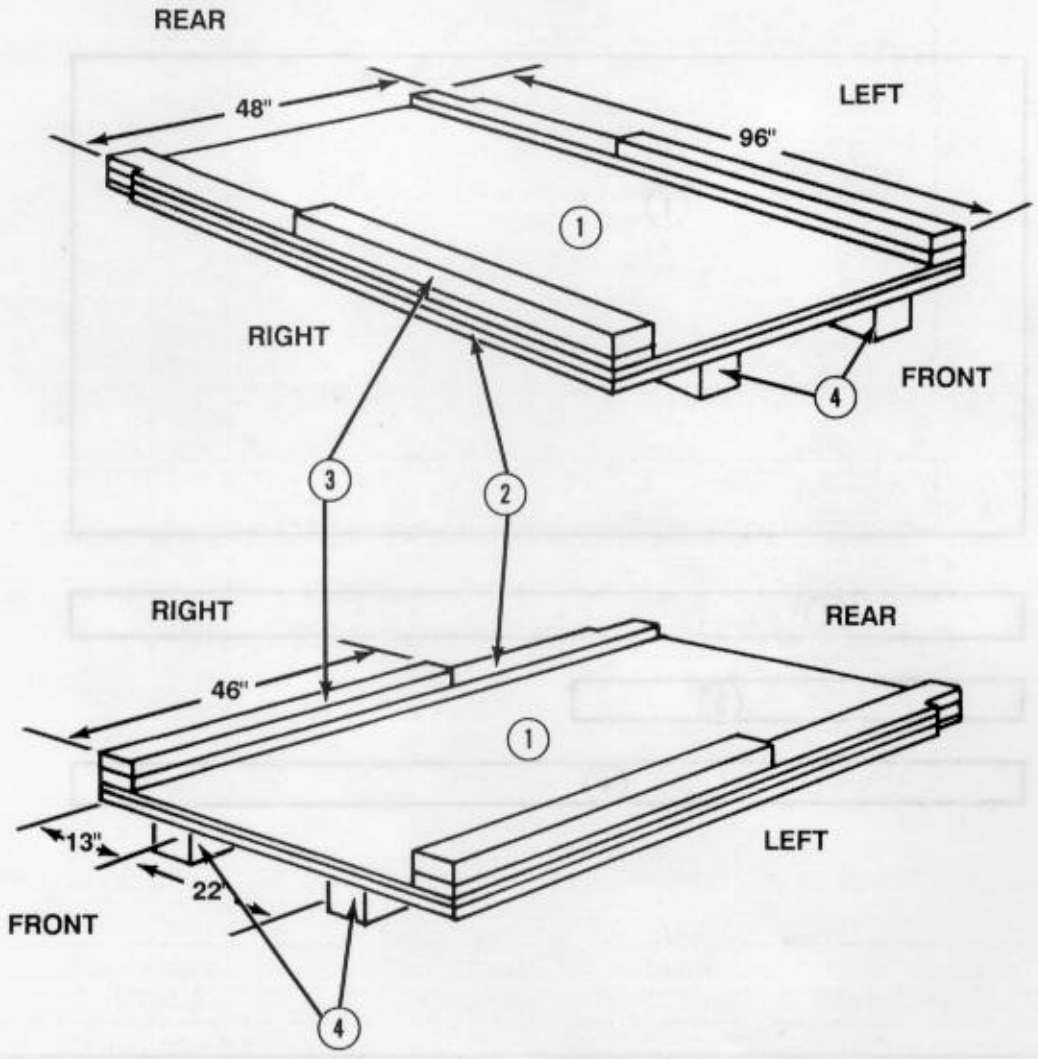
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	48	96	3/4-inch plywood
2	2	4	96	3/4-inch plywood
3	2	3 1/2 (actual)	46	2- by 4-inch lumber
4	2	3 1/2 (actual)	96	4- by 4-inch lumber

Figure 9-8. Material required for load spreader for honeycomb stack 4

Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-8.

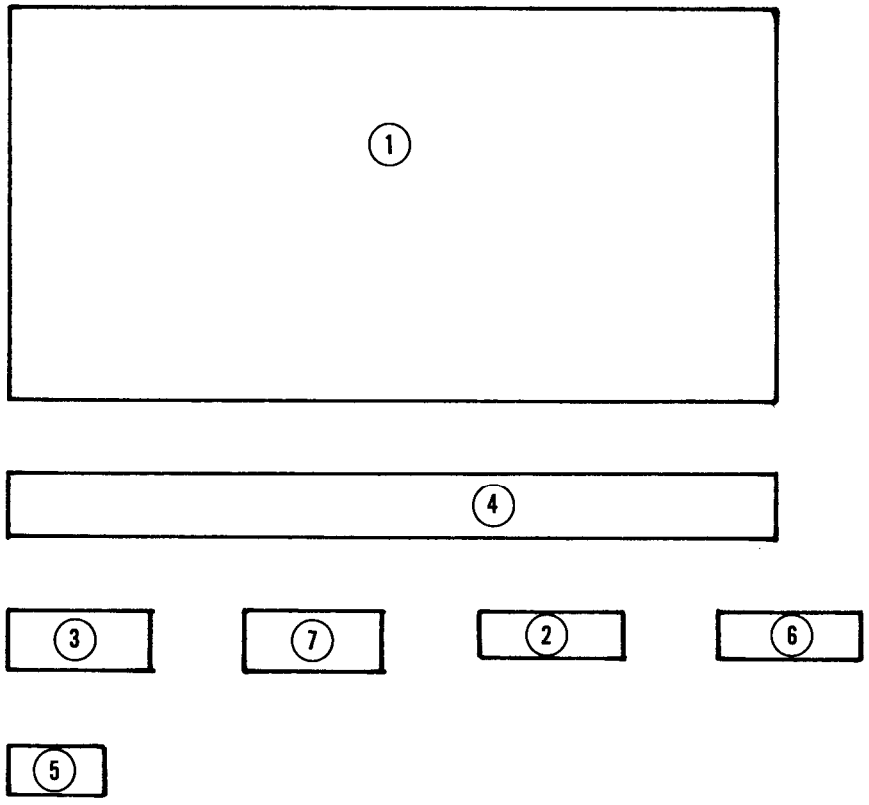


Step:

1. Construct the load spreader for honeycomb stack 4 as shown.
2. Secure the plywood and lumber in place, as shown, with eightpenny and sixteen-penny nails.

Figure 9-9. Load spreader for honeycomb stack 4 constructed

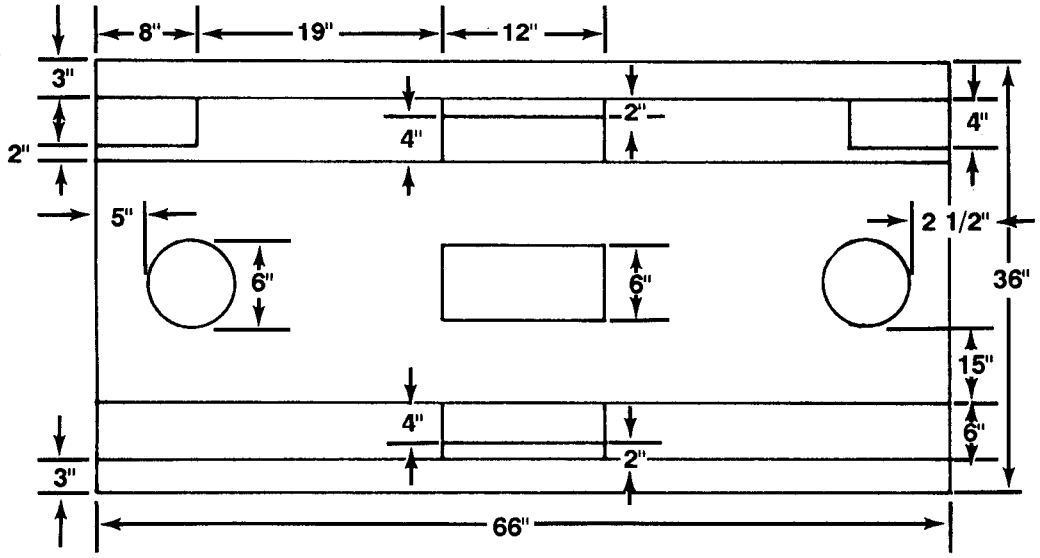
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

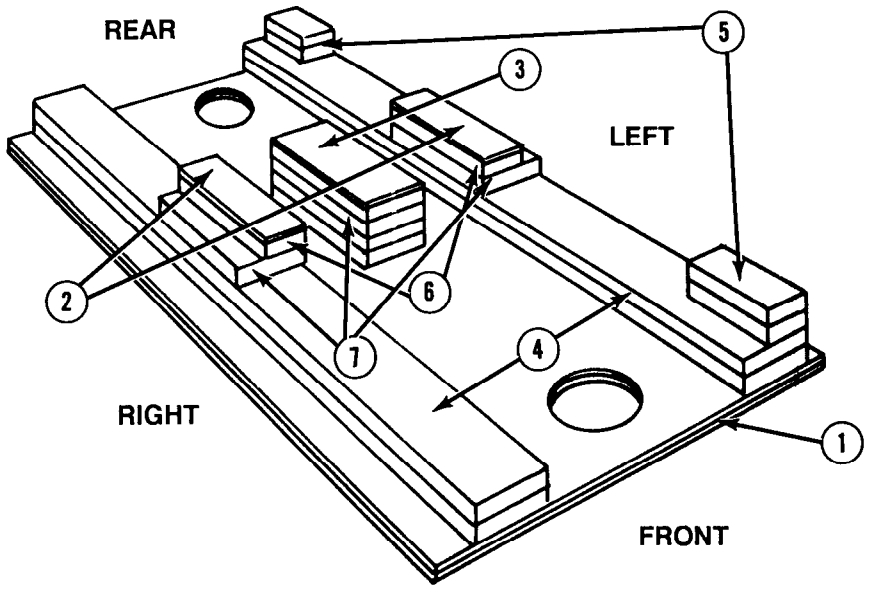


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	2	36	66	3/4-inch plywood
2	2	4	12	3/4-inch plywood
3	1	6	12	3/4-inch plywood
4	4	5 1/2 (actual)	66	2- by 6-inch lumber
5	4	5 1/2 (actual)	8	2- by 6-inch lumber
6	2	3 1/2 (actual)	12	2- by 4-inch lumber
7	6	6	12	2- by 4-inch lumber

Figure 9-10. Material required for load spreader for honeycomb stack 5

Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-10.



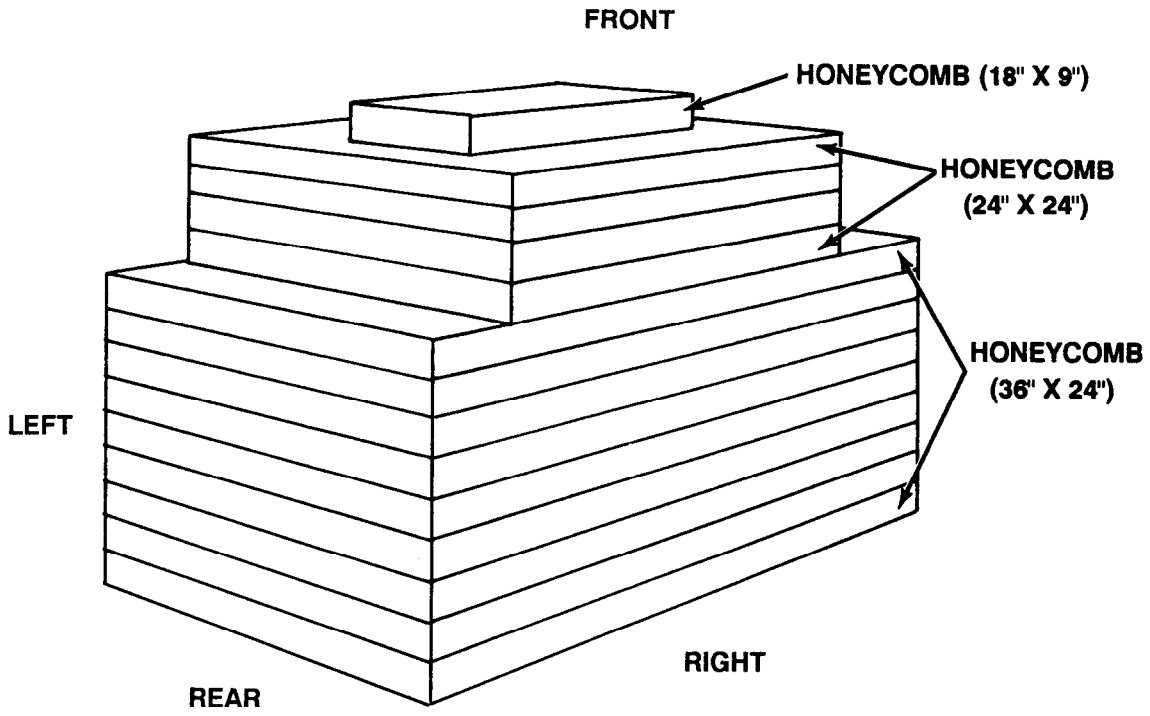


Step:

1. Construct the load spreader for honeycomb stack 5 as shown.
2. Secure the plywood and lumber in place, as shown, with eightpenny and sixteen-penny nails.

Figure 9-11. Load spreader for honeycomb stack 5 constructed

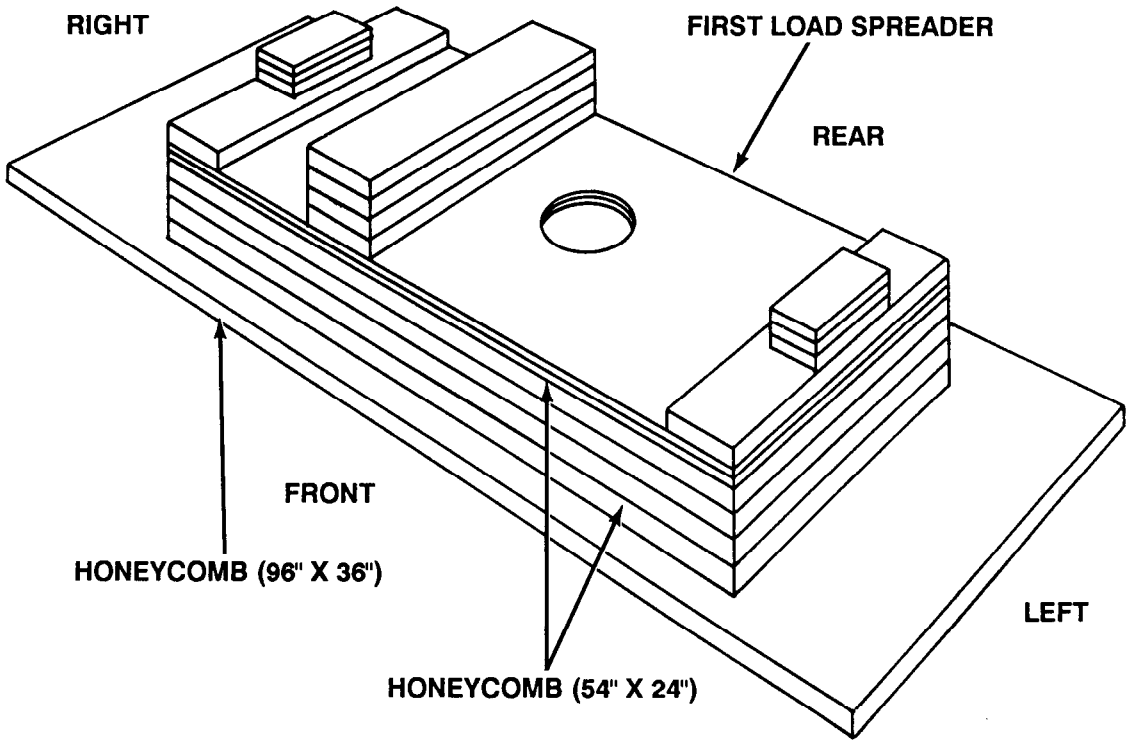
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	9	36	24	Honeycomb	Place honeycomb as the base.
	4	24	24	Honeycomb	Center honeycomb on top of the base.
	1	18	9	Honeycomb	Center honeycomb on top of 24- by 24-inch honeycomb.

Figure 9-12. Honeycomb stack 1 prepared

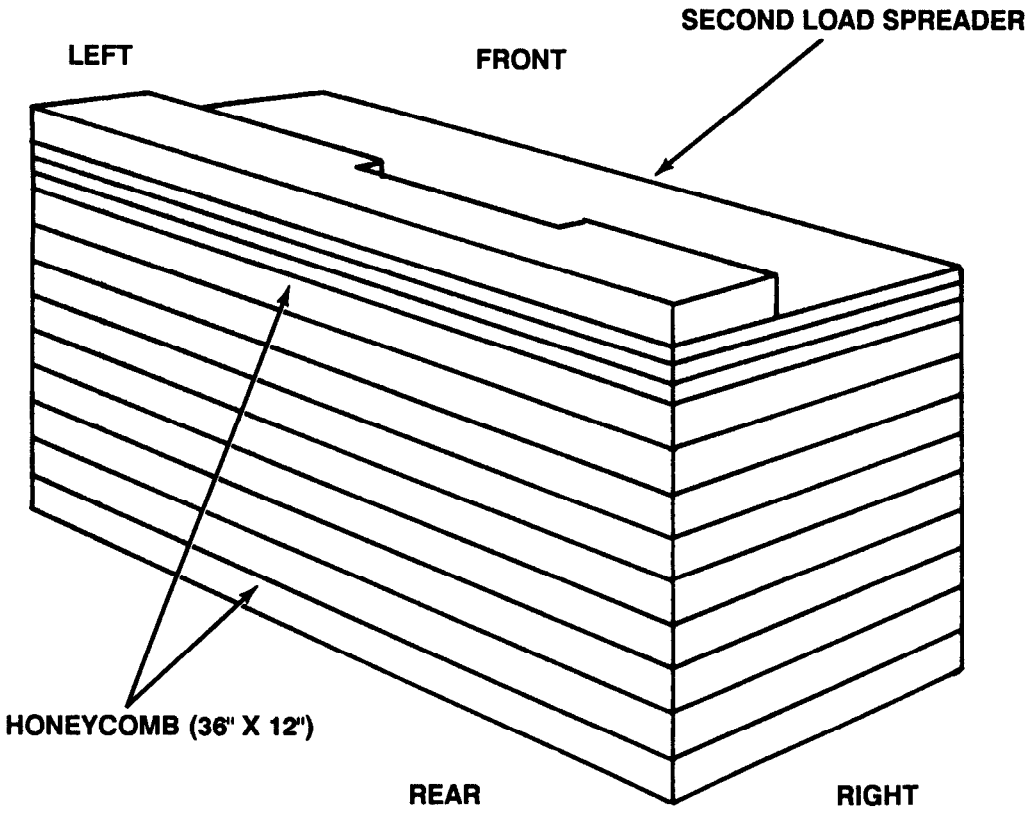
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	1	96	36	Honeycomb	Place honeycomb as the base.
	4	54	24	Honeycomb	Center honeycomb on top of the base.
				Load Spreader	Place load spreader on top of 54- by 24-inch honeycomb.

Figure 9-13. Honeycomb stack 2 prepared

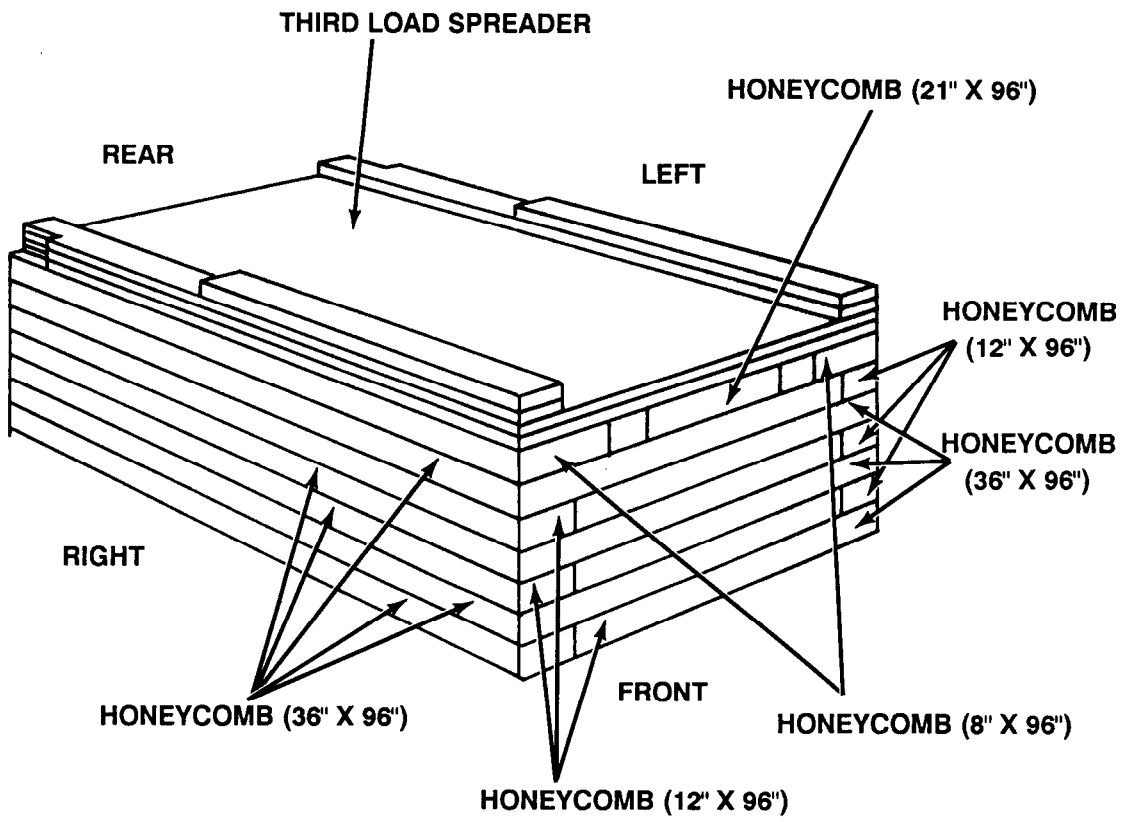
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
3	9	36	12	Honeycomb Load Spreader	Place honeycomb as the base. Place load spreader on top of the base.

Figure 9-14. Honeycomb stack 3 prepared

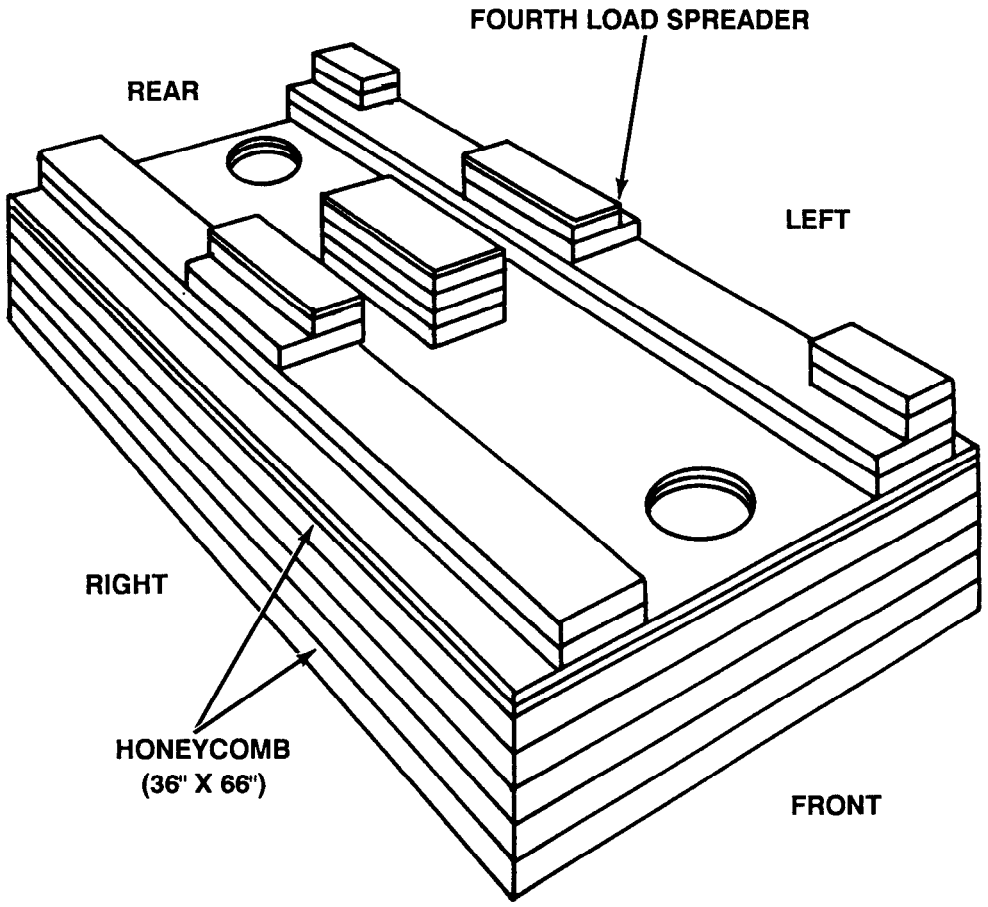
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
4	6	36	96	Honeycomb	Form a 48- by 96-inch base using the 36- by 96-inch and 12- by 96-inch pieces of honeycomb. Alternate the layers.
	6	12	96	Honeycomb	
	1	21	96	Honeycomb	Center honeycomb on top of the base.
	2	8	96	Honeycomb	Place one piece of honeycomb on each side of the base even with the 96-inch edge.
				Load Spreader	Place load spreader on top of the base.

Figure 9-15. Honeycomb stack 4 prepared

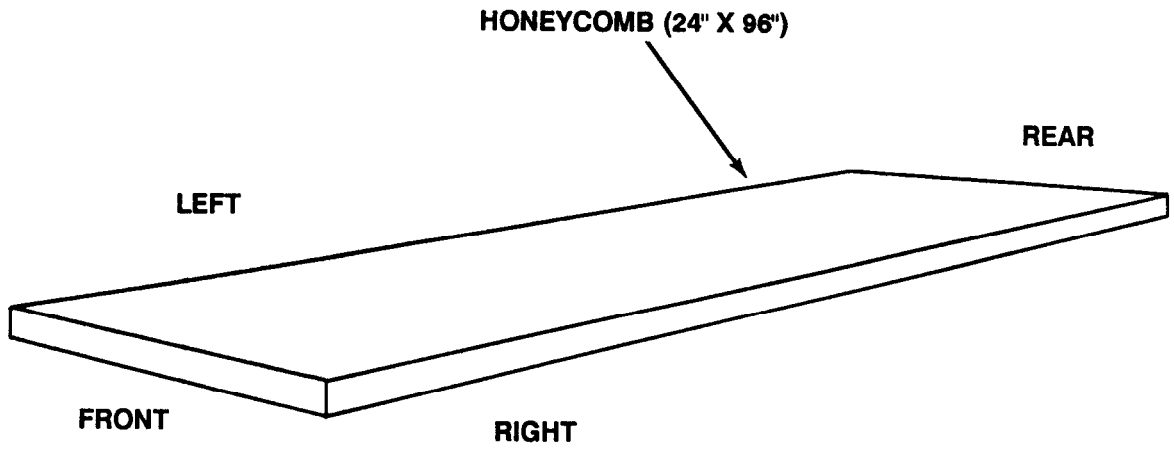
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
5	5	36	66	Honeycomb Load Spreader	Place honeycomb as the base. Place load spreader on top of the base.

Figure 9-16. Honeycomb stack 5 prepared

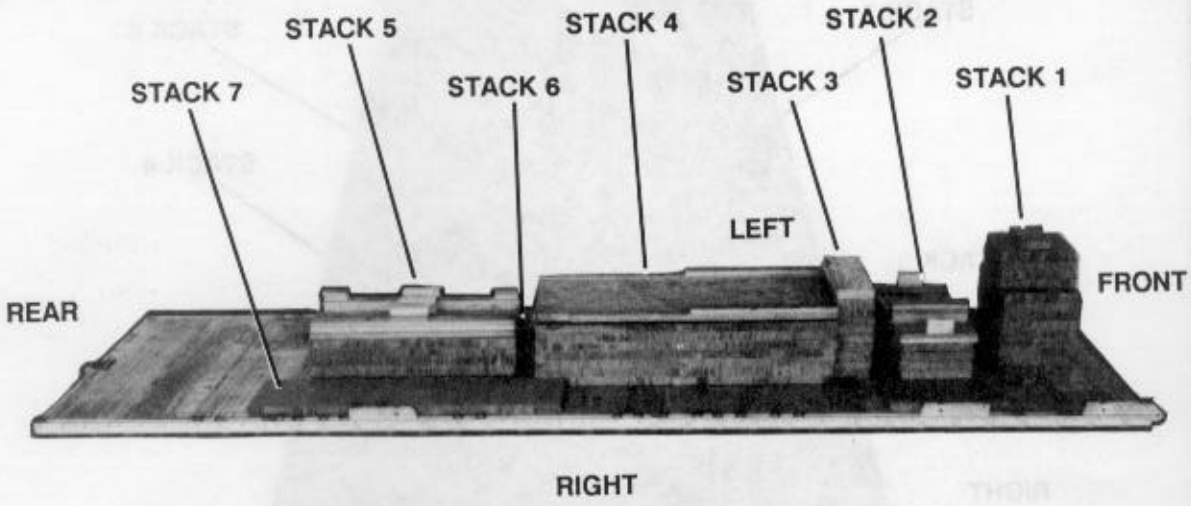
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
6	1	24	96	Honeycomb	Form stack.
7	1	24	96	Honeycomb	Form stack.

Figure 9-17. Honeycomb stacks 6 and 7 prepared

Note: The honeycomb may need to be adjusted slightly when the truck is positioned on the stacks.



Stack Number	Position of Stack on Platform
	Place stack:
1	Centered 13 inches from the front edge of the platform.
2	Centered 4 inches from the rear of stack 1, 2 1/2 inches from inside right rail.
3	Centered flush against the rear of stack 2.
4	Centered flush against the rear of stack 3.
5	Centered 6 inches from the rear of stack 4.
6	63 1/2 inches from the rear of the platform and 2 inches from the left side of the platform.
7	63 1/2 inches from the rear of the platform and 2 inches from the right side of the platform.

Figure 9-18. Honeycomb stacks positioned on platform

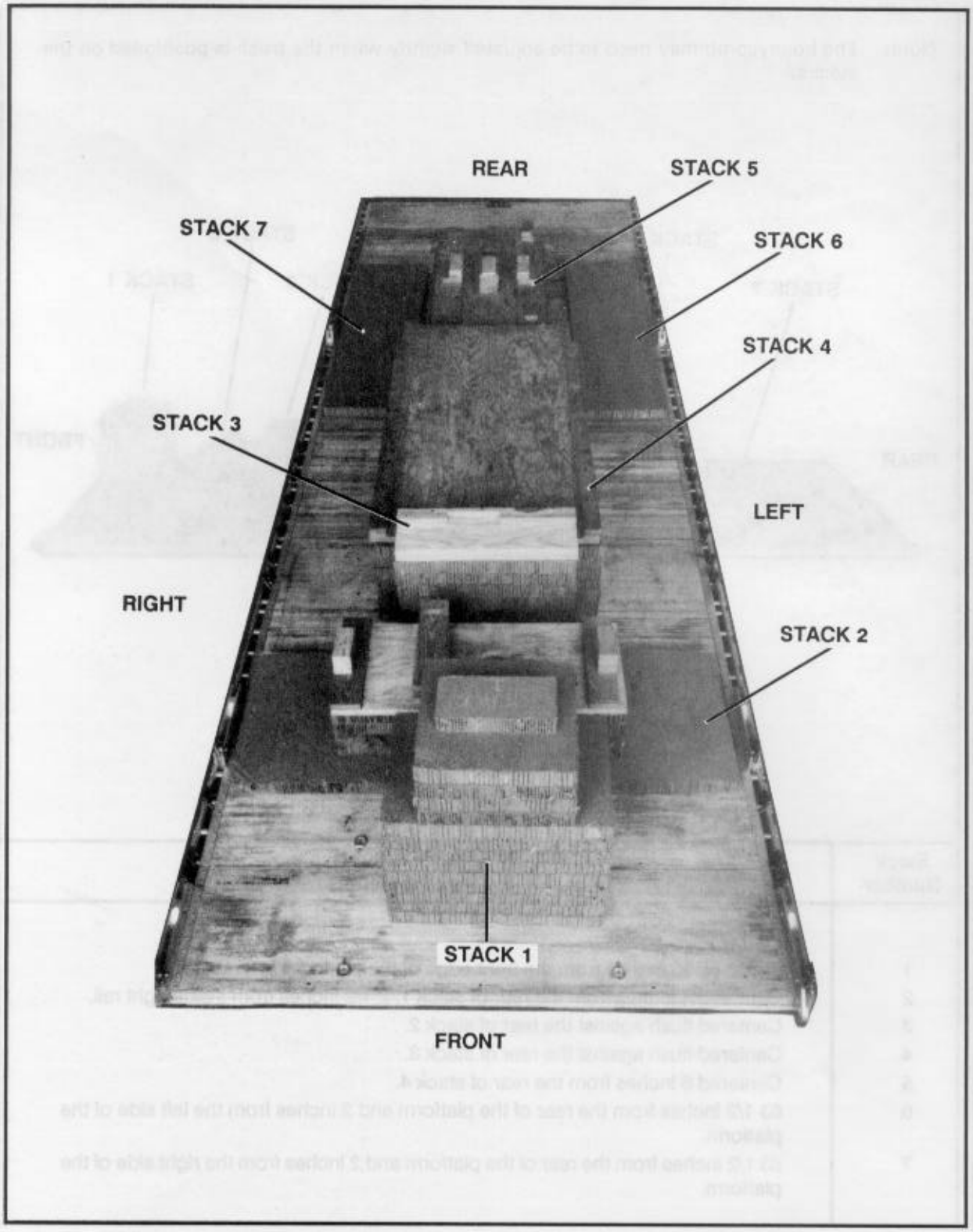


Figure 9-19. Front view of honeycomb stacks positioned on platform

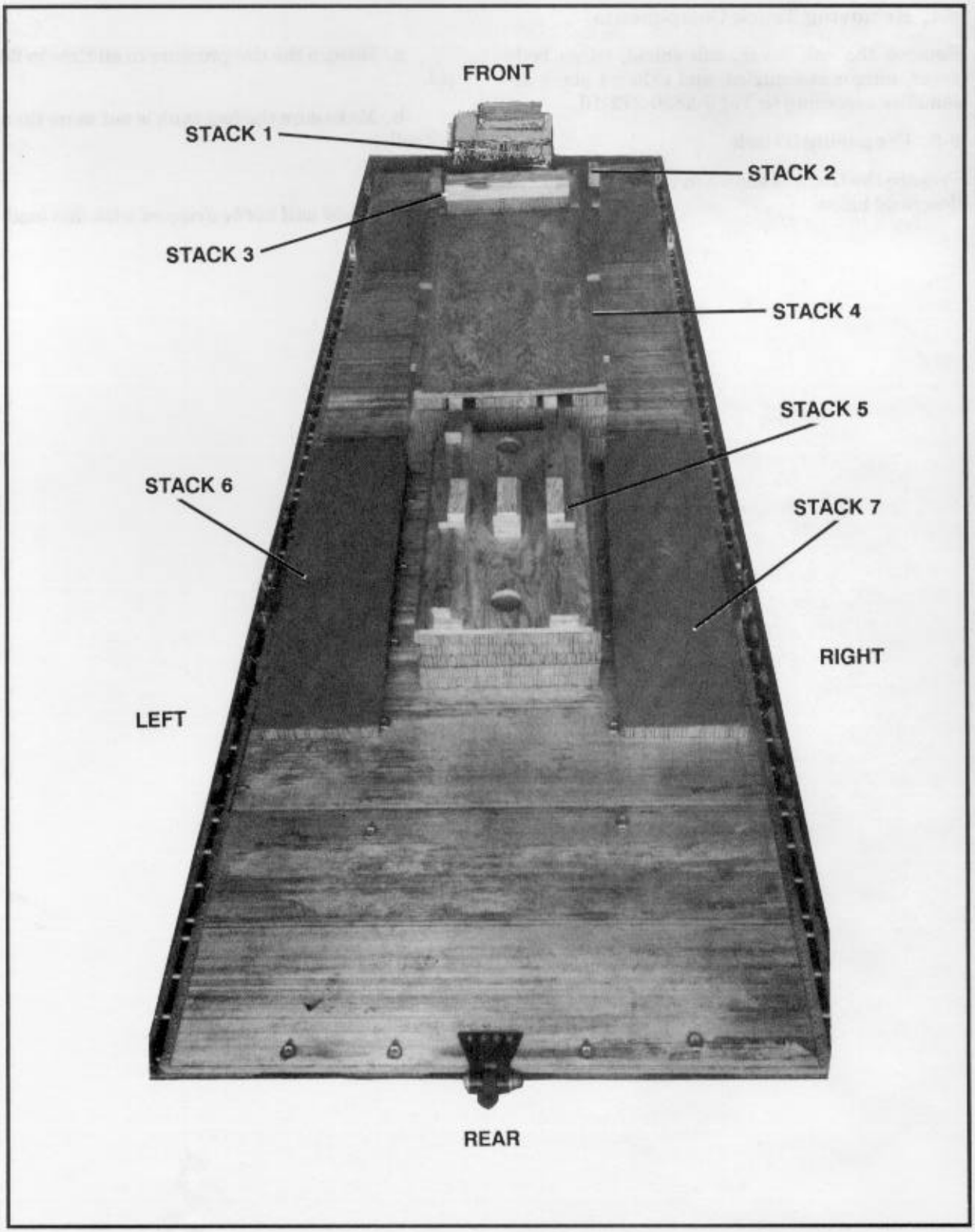


Figure 9-20. Rear view of honeycomb stacks positioned on platform

9-4. Removing Truck Components

Remove the cab cover, cab shield, cargo body cover, mirror assemblies, and exhaust stack assemblies according to TM 9-2320-272-10.

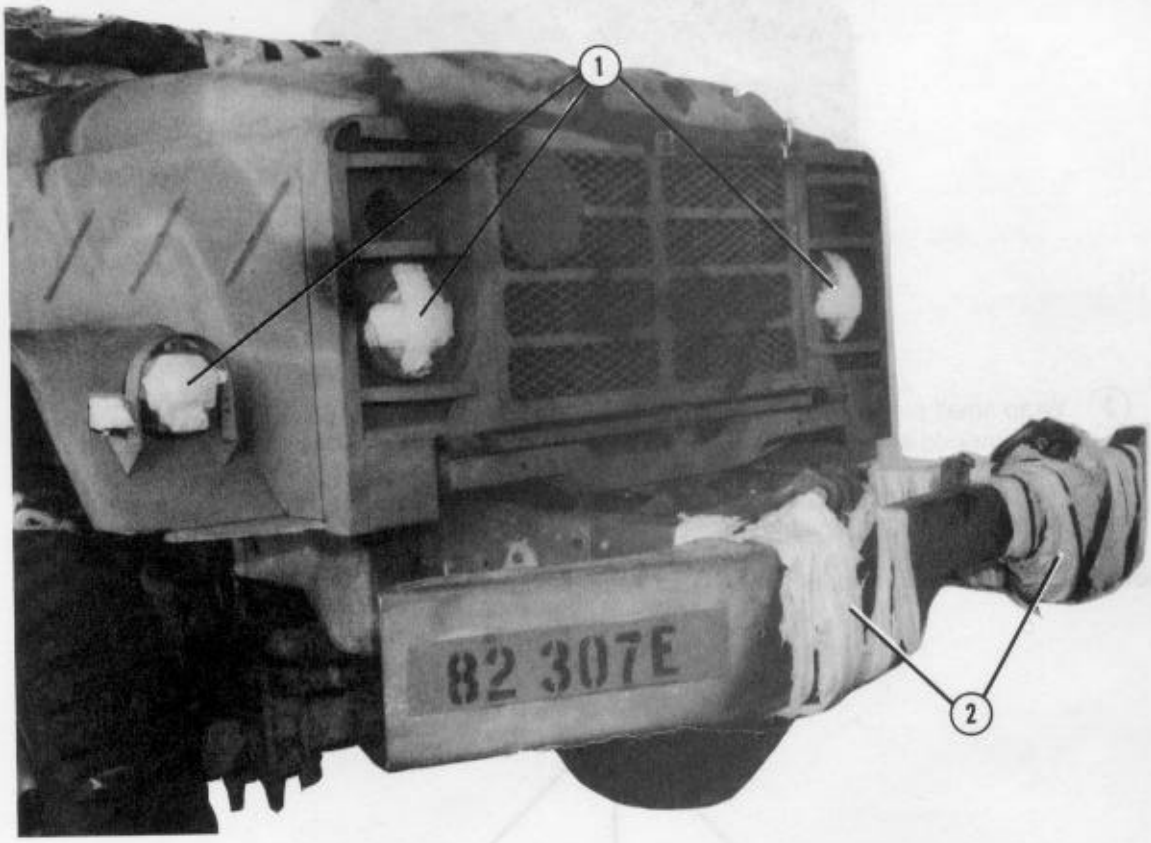
9-5. Preparing Truck

Prepare the truck as shown in Figure 9-21 and as described below.

a. Reduce the tire pressure in all tires to 28 psi.

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

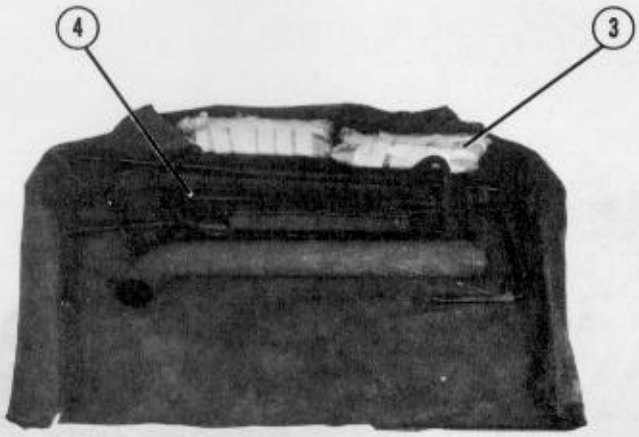
Note:
The cab shield will not be dropped with this load.



(1) Tape the headlights and turn signals.

(2) Pad and tape the bumper with cellulose wadding.

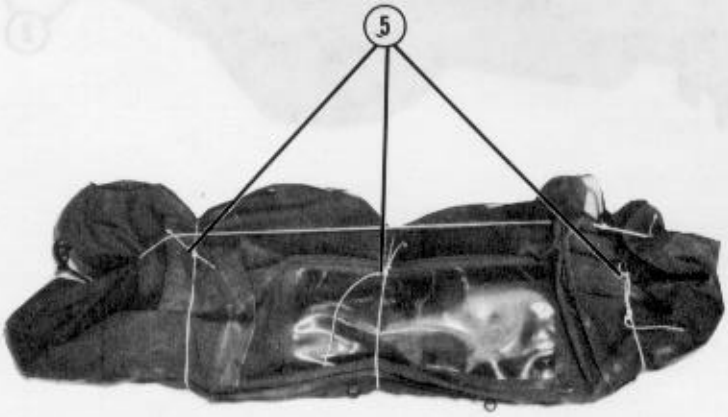
Figure 9-21. Truck prepared



(3) Wrap small pieces of equipment in cellulose wadding. Tape the wadding in place. Place the wrapped items on the soft cab cover or the cargo cover.

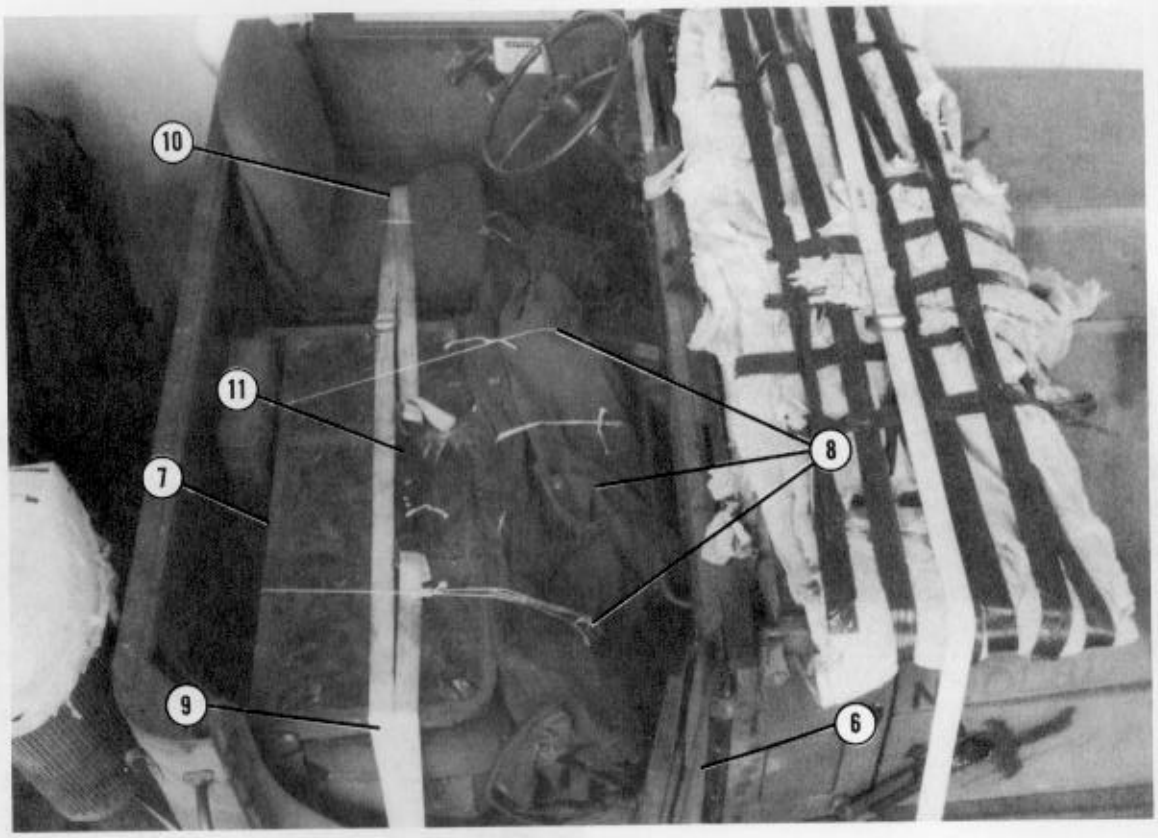
(4) Place the side mirrors, soft cab cover, and the exhaust stack on the cover. Pad the sharp edges with cellulose wadding, and tape the wadding in place.

Note: Other small components may also be placed on the cover.



(5) Wrap the cover over the items placed on it. Tie the cover in place with type III nylon cord.

Figure 9-21. Truck prepared (continued)



(6) Open the truck doors.

(7) Fold the back of the passenger seat down.

(8) Place the wrapped equipment on the driver floor compartment, and secure it in two places with type III nylon cord.

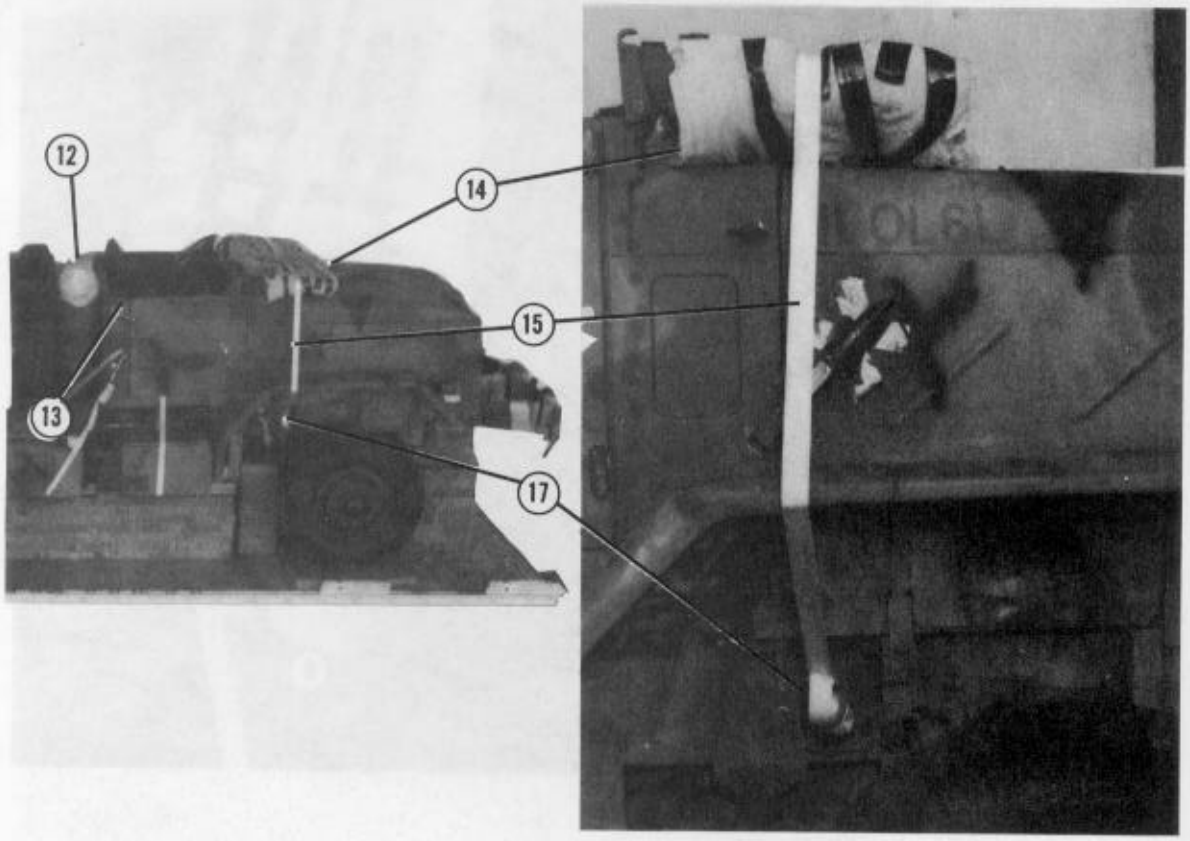
(9) Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C7-1-5. Lay the 30-foot tiedown strap across the front seat. Pass one end of the strap out of the right door, around the OVM tool box, back in the right door, and up across the front seat.

(10) Pass the other end of the 30-foot tiedown strap out of the left door, around the air cleaner, back in the left door, and up across the front seat.

Note: Pad the door frames with cellulose wadding where the strap touches.

(11) Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 9-21. Truck prepared (continued)



(12) Cover the exhaust with cellulose wadding, and tape the wadding in place.

(13) Close the doors, and safety them with type III nylon cord.

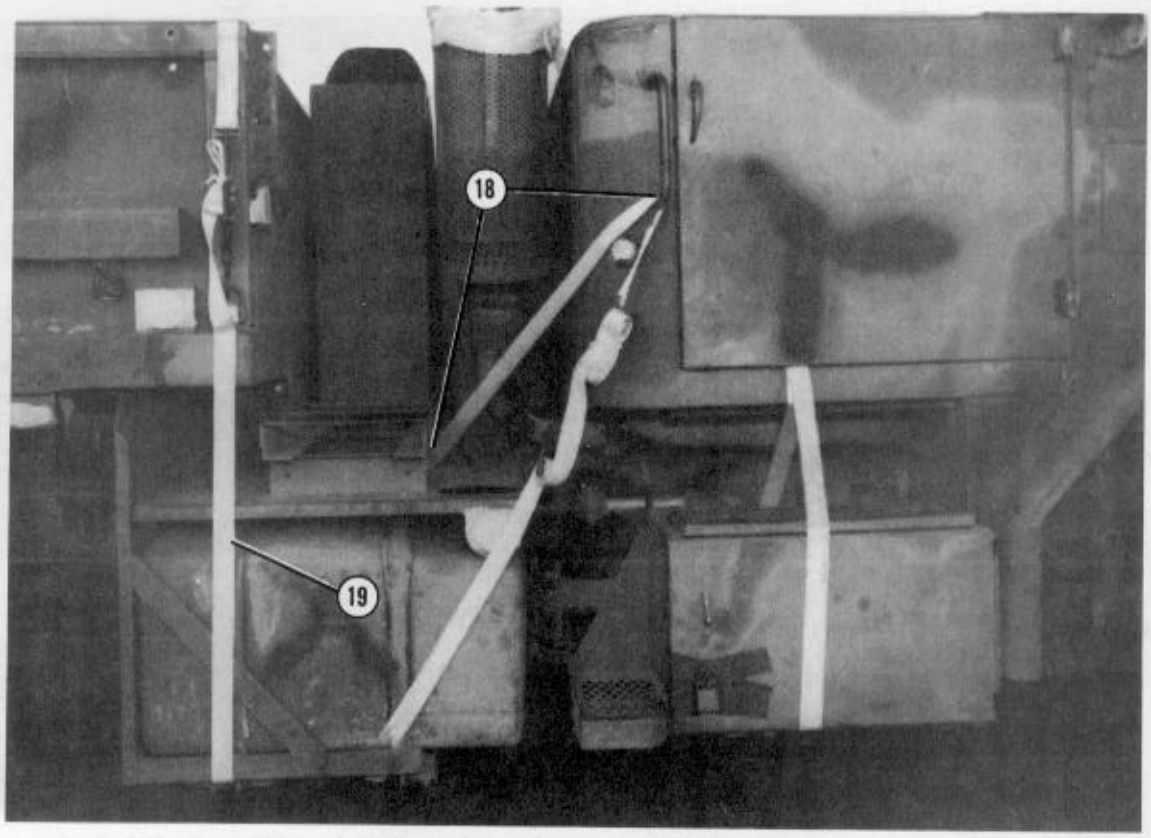
(14) Fold the windshield down. Pad the windshield with cellulose wadding, and tape the wadding in place.

(15) Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C7-1-5. Lay the strap across the windshield. Pass one end of the strap over the right side of the truck to the tiedown provision.

(16) Pass the other end of the 30-foot tiedown strap over the left side of the truck to the tiedown provision (not shown).

(17) Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 9-21. Truck prepared (continued)

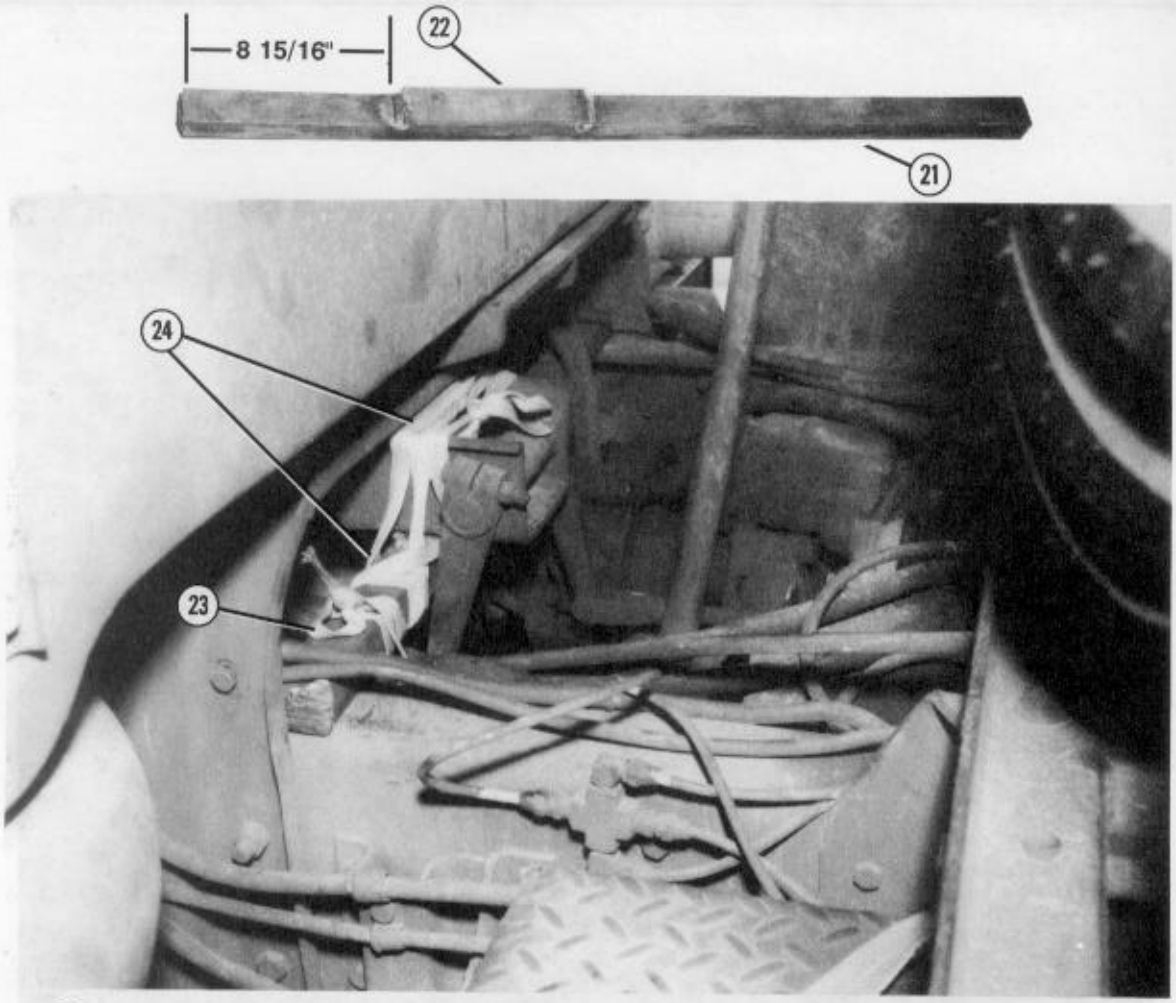


(18) Pass the end of a 15-foot tiedown strap through the right hand-held handle, through the right front fuel tank hangers, and under the fuel tank. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

(19) Pass the end of a 15-foot tiedown strap over the first right side rack socket and around the rear fuel tank hanger. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

(20) Repeat the procedures in steps 18 and 19 above for the left side of the truck.

Figure 9-21. Truck prepared (continued)



(21) Construct the components of a cab support bar using a 7/16- by 1 1/2- by 7 1/8-inch piece of steel, a 3/4- by 1 1/2- by 34-inch piece of steel, and a 7/16- by 1 1/2- by 34-inch piece of steel.

Note: The 34-inch piece of steel must be 1 3/16-inch thick. A single piece or a combination of pieces may be used to get the correct thickness. The unit will supply this item.

(22) Weld the pieces of steel together as shown.

Note: The bar must be positioned from the right side of the truck.

(23) Slide the bar in place with the 7 1/8-inch piece of steel up and with one end of the bar over each mainframe rail and the bar under the transfer link assembly support. The 7 1/8-inch metal plate must be closest to the left side of the truck.

(24) Tie each end of the bar securely in place with several turns of 1/2-inch tubular nylon webbing.

Figure 9-21. Truck prepared (continued)

9-6. Building Frame Support

Use the material in Figure 9-22 to build the frame support. Build the frame support as shown in Figure 9-23.

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

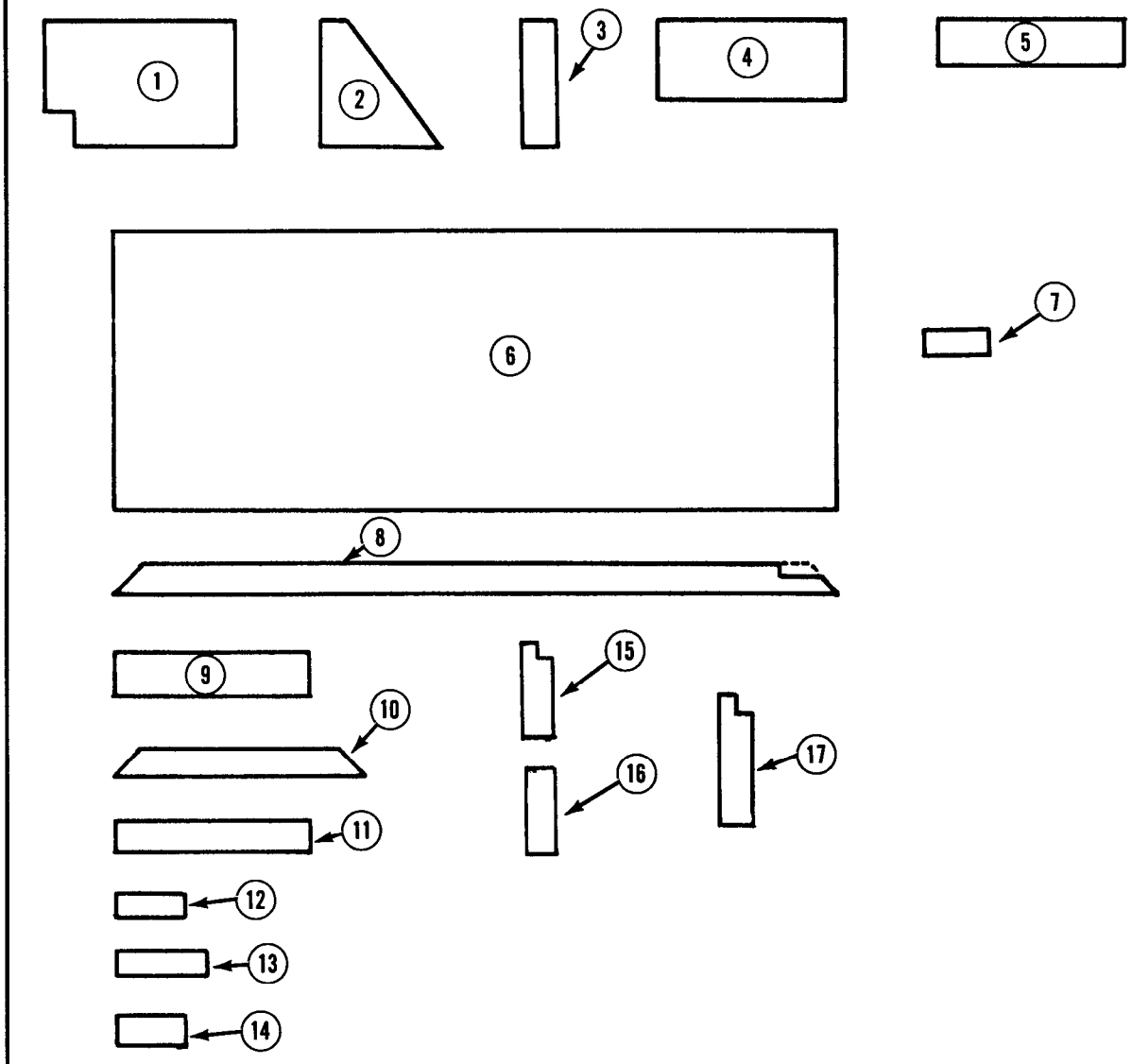
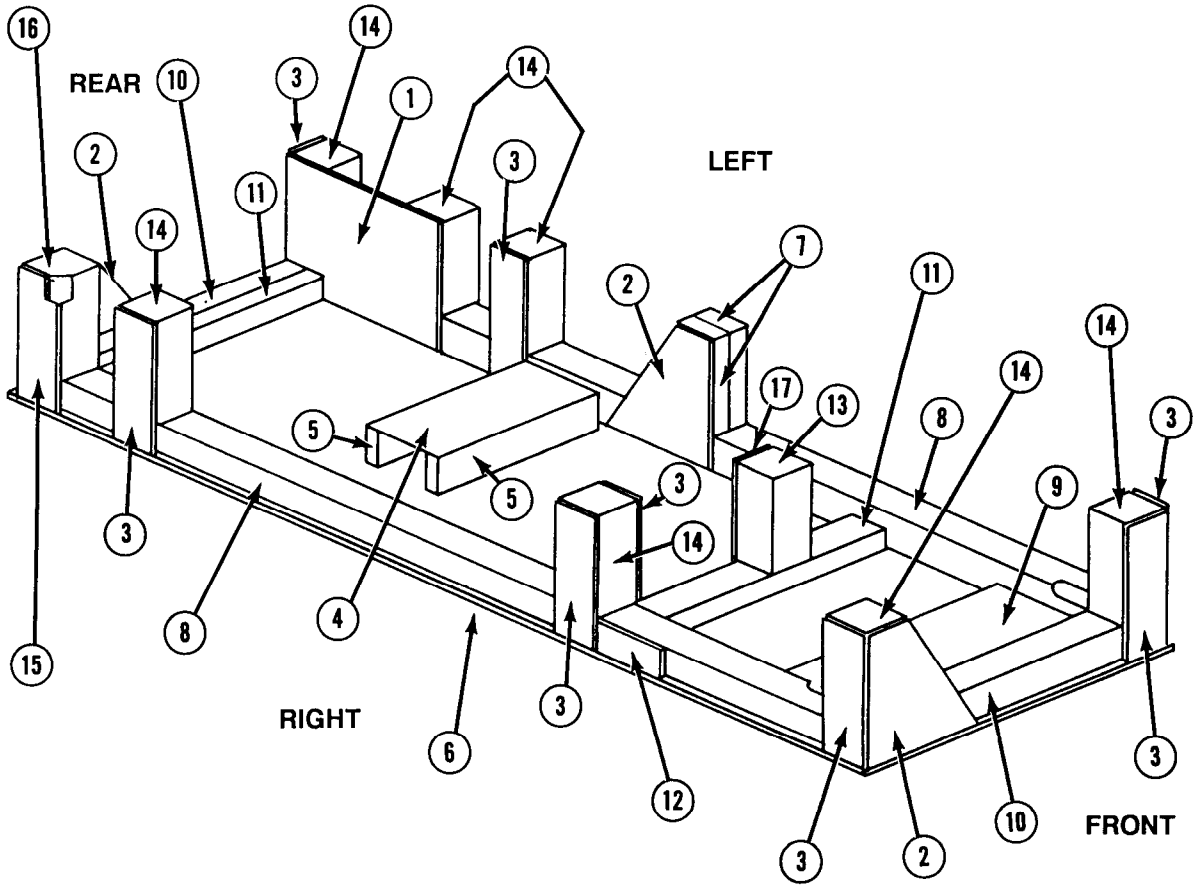


Figure 9-22. Material required for frame support

Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	13 1/2	21 1/2	3/4-inch plywood
2	3	13 1/2	13 1/2	3/4-inch plywood
3	8	3 1/2	13 1/2	3/4-inch plywood
4	1	8 1/2	20	3/4-inch plywood
5	2	3 1/2 (actual)	20	2- by 4-inch lumber
6	1	36	96	3/4-inch plywood
7	2	3 1/2 (actual)	10	2- by 4-inch lumber
8	2	3 1/2 (actual)	96	4- by 4-inch lumber
9	1	5 1/2 (actual)	26	2- by 6-inch lumber
10	2	3 1/2 (actual)	33	4- by 4-inch lumber
11	2	3 1/2 (actual)	26	2- by 4-inch lumber
12	1	3 1/2 (actual)	10	2- by 4-inch lumber
13	1	3 1/2 (actual)	10 3/4	4- by 4-inch lumber
14	7	3 1/2 (actual)	10	4- by 4-inch lumber
15	1	3 1/2	13 1/2	3/4-inch plywood
16	1	3 1/2 (actual)	10	4- by 4-inch lumber
17	1	3 1/2	12 1/4	3/4-inch plywood

Figure 9-22. Material required for frame support (continued)

Notes: a. This drawing is not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-22.



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 9-23. Frame support constructed

Note: These drawings are not drawn to scale.

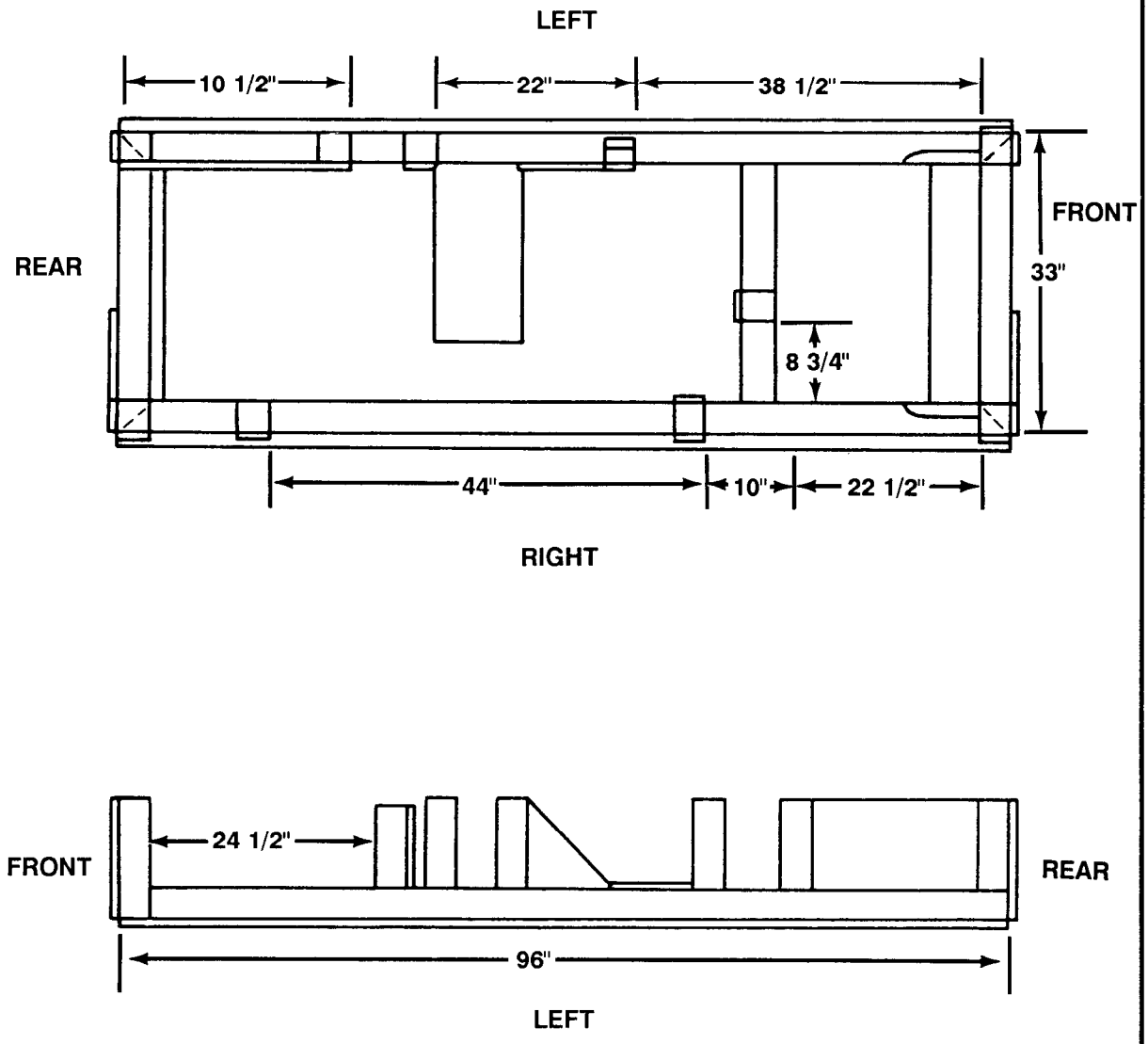
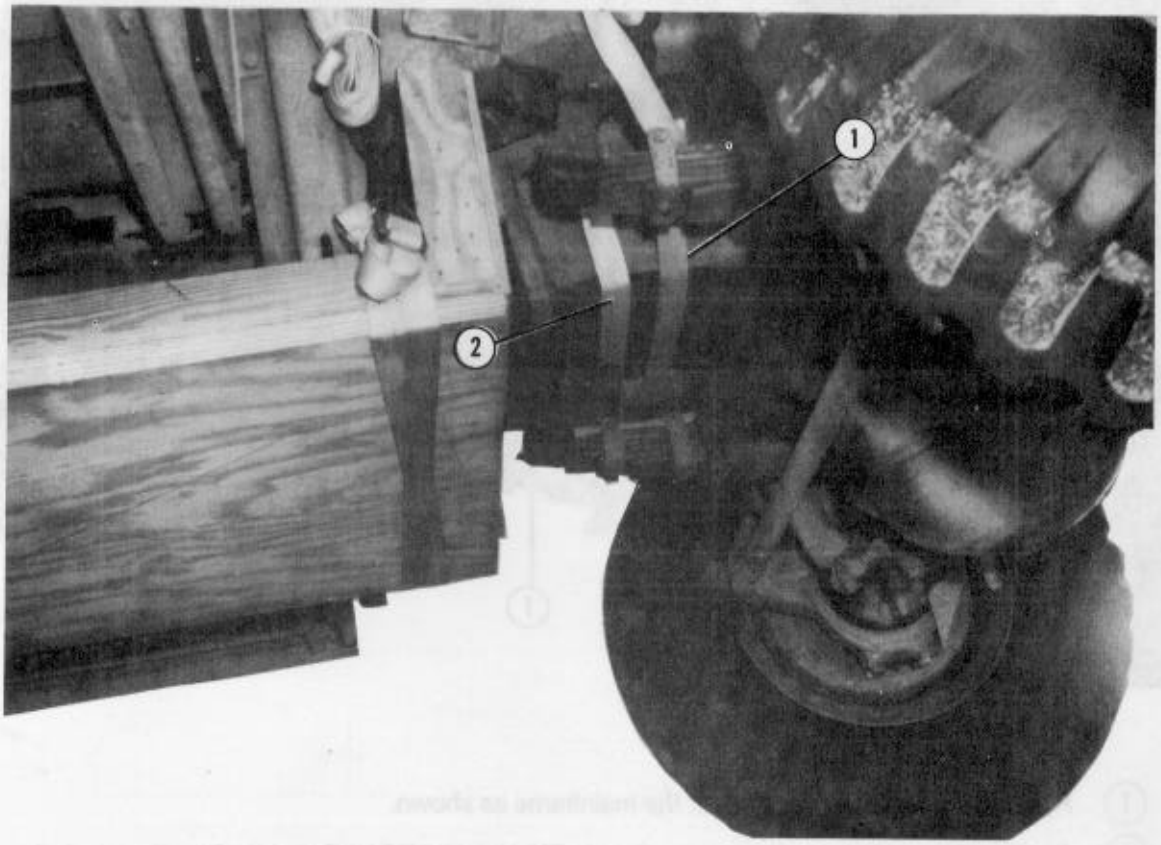


Figure 9-23. Frame support constructed (continued)

9-7. Installing Engine Supports and Frame Support

Install the engine supports and the frame support as shown in Figures 9-24 and 9-25 using two 15-foot and two 30-foot tiedown straps.

Note: Make sure the D-ring and load binder are not against the oil pan.

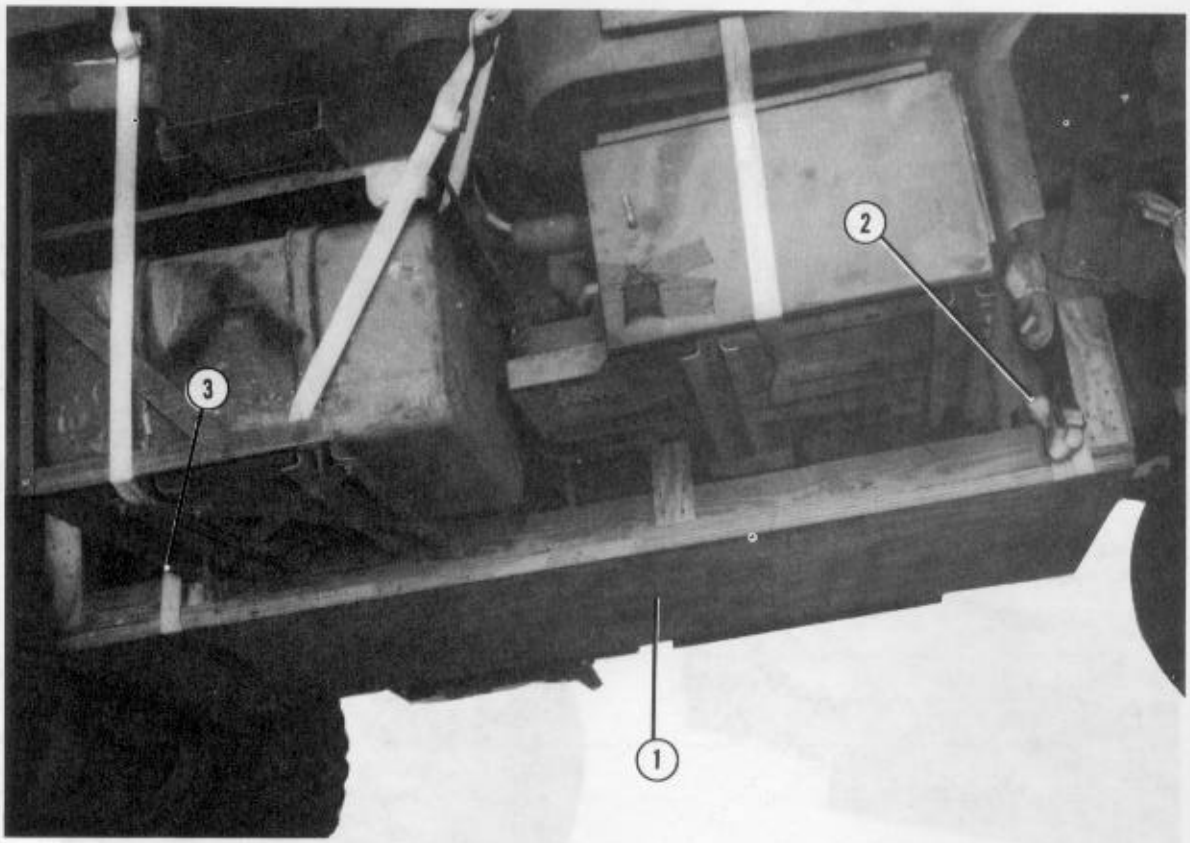


(1) Pass the end of a 15-foot tiedown strap around the right frame rail, under the front part of the oil pan, and around the left frame rail. Place a 12- by 12-inch piece of felt between the oil pan and the strap. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

(2) Pass a second 15-foot tiedown strap as explained in step 1 above, except under the rear of the oil pan. Place a 12- by 12-inch piece of felt between the oil pan and the strap.

Figure 9-24. Engine supports installed

CAUTION
Ensure the frame support is not placed on hydraulic lines.



(1) Position the frame support under the mainframe as shown.

(2) Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C17-1-5. 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.

(3) Install a second 30-foot tiedown strap near the rear of the frame support adapting the procedures given in step 2 above.

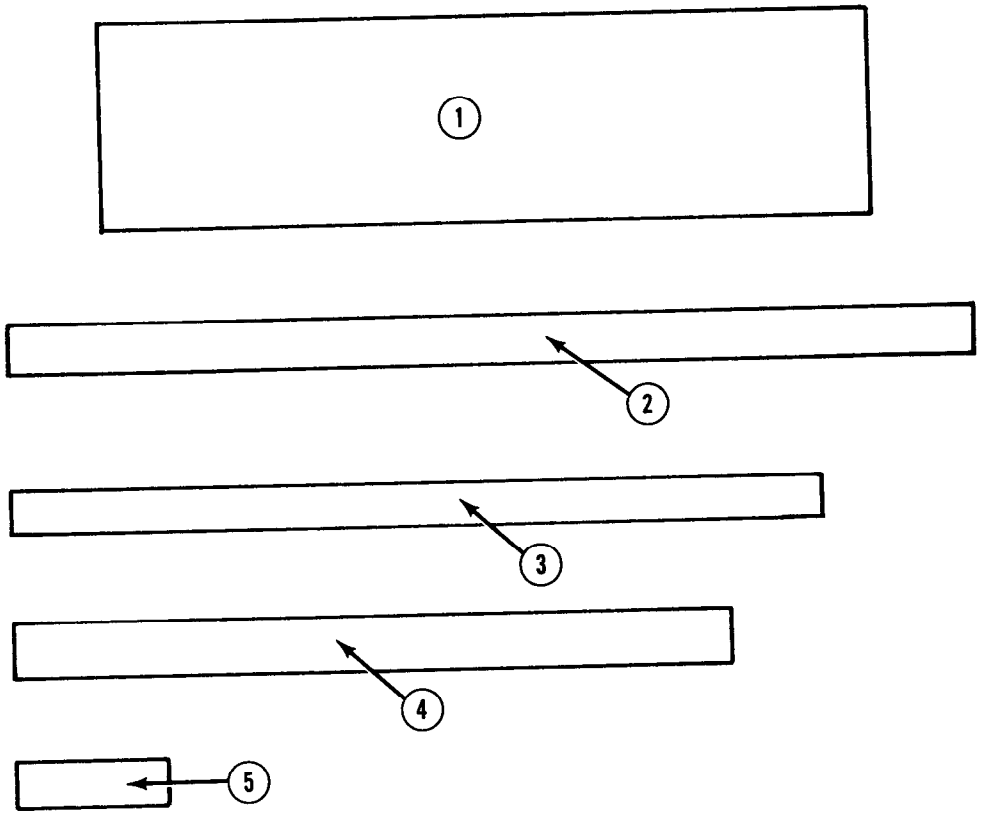
Note: Position the load binders on the side of the frame support so that the load binders will not touch the honeycomb stack.

Figure 9-25. Frame support installed

9-8. Constructing and Installing Rear Suspension Sling Spreader

Use the material in Figure 9-26 to build the rear suspension sling spreader. Construct the rear suspension sling spreader as shown in Figure 9-27. Install the rear suspension sling spreader as shown in Figure 9-28.

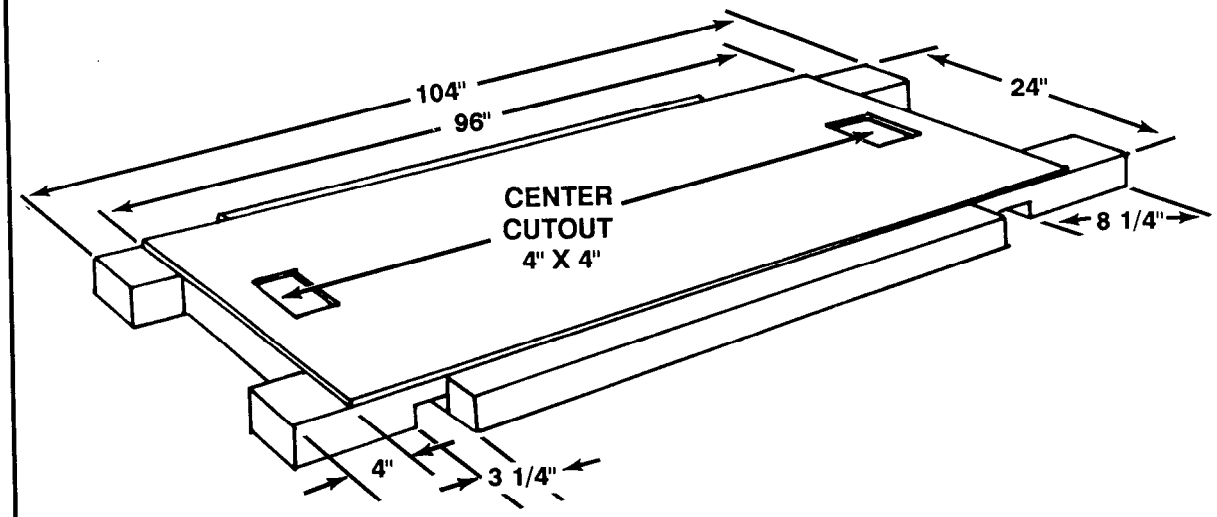
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

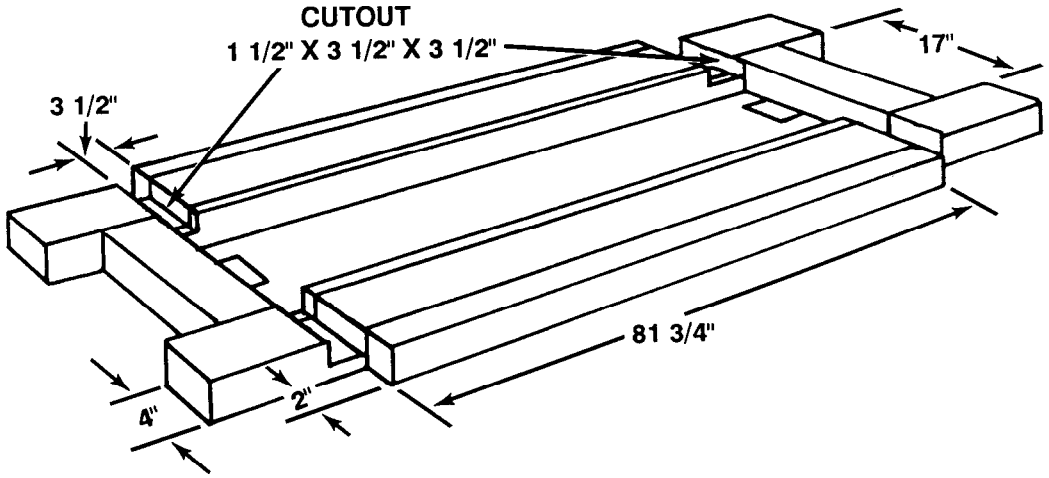


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	24	96	3/4-inch plywood
2	2	3 1/2 (actual)	104	4- by 4-inch lumber
3	2	3 1/2 (actual)	88 1/2	2- by 4-inch lumber
4	2	3 1/2 (actual)	81 3/4	2- by 4-inch lumber
5	2	3 1/2 (actual)	17	4- by 4-inch lumber

Figure 9-26. Material required for the rear suspension sling spreader

Note: These drawings are not drawn to scale.

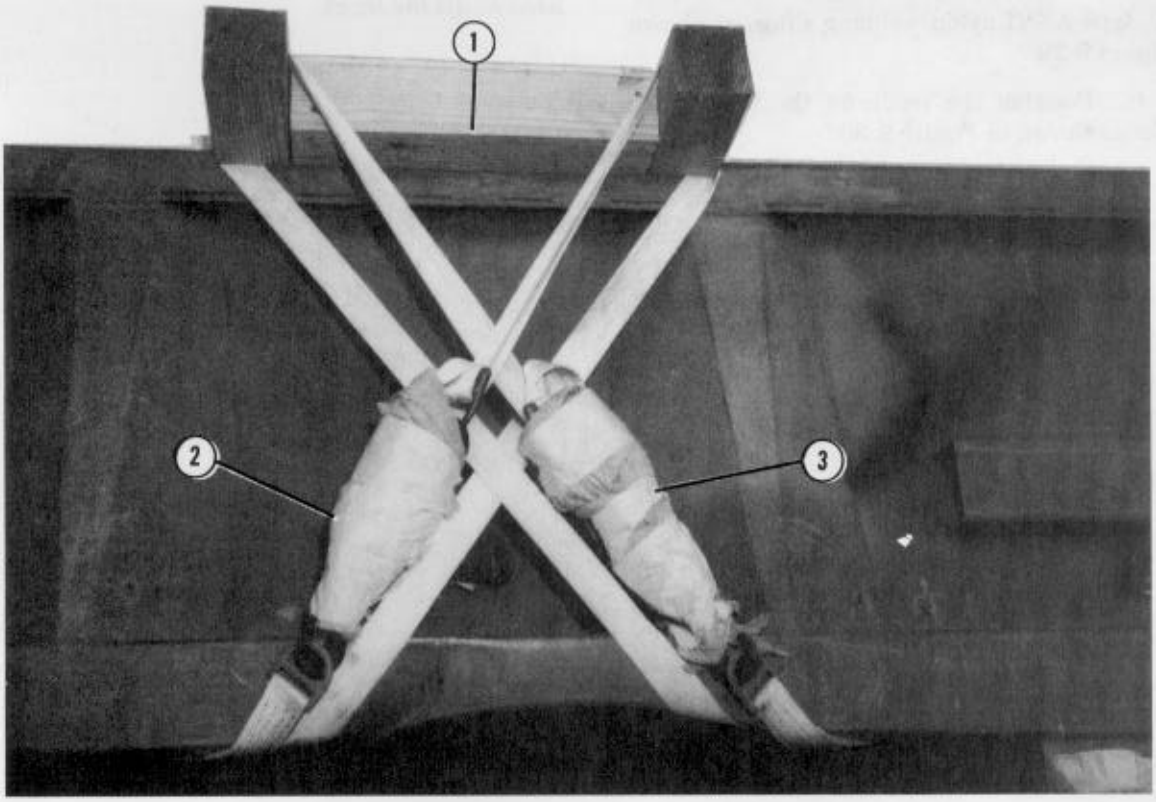




Step:

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

Figure 9-27. Rear suspension sling spreader constructed



(1) Center the rear suspension sling spreader on the body of the truck, 33 inches from the front of the bed wall.

Note: Make sure that the cutouts fit down over the walls of the truck.

(2) Pass a 15-foot tiedown strap through the hole in the fifth bed support under the bed, up around the forward support brace of the spreader, and back down. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5. Pad the load binder with cellulose wadding and tape.

(3) Pass another 15-foot tiedown strap through the hole in the third bed support under the bed, up around the rear support brace of the spreader, and back down. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5. Pad the load binder with cellulose wadding and tape.

(4) Adapt the procedures in steps 2 and 3 above to secure the left side of the rear suspension sling spreader (not shown).

Figure 9-28. Rear suspension sling spreader installed

9-9. Positioning Truck

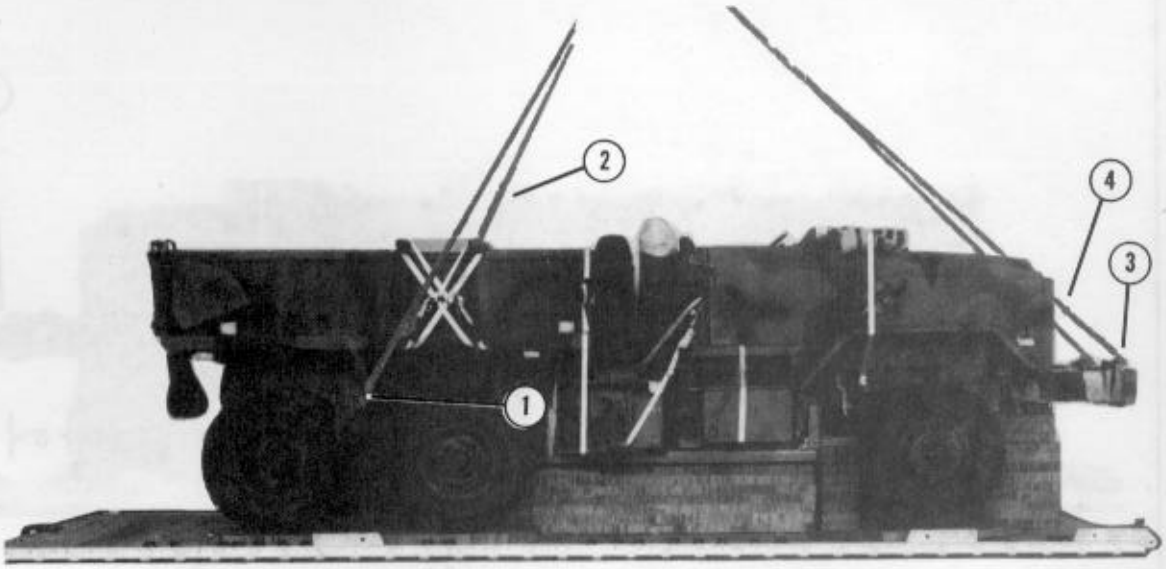
Position the truck as described below.

a. Install two 20-foot and two 16-foot (4-loop), type XXVI nylon webbing slings as shown in Figure 9-29.

b. Position the truck on the honeycomb stacks as shown in Figure 9-30.

Note:
Other slings of equal or greater strength may be used to lift the truck.

Note: Pad or tape the area where the slings touch the truck to protect the slings.



(1) Pass the end of a 16-foot (4-loop), type XXVI nylon webbing sling between the side body and the body floor of the truck. Attach the end of the sling to the spring saddle with a screw-pin clevis.

(2) Install another sling on the other side of the truck as described in step 1 above.

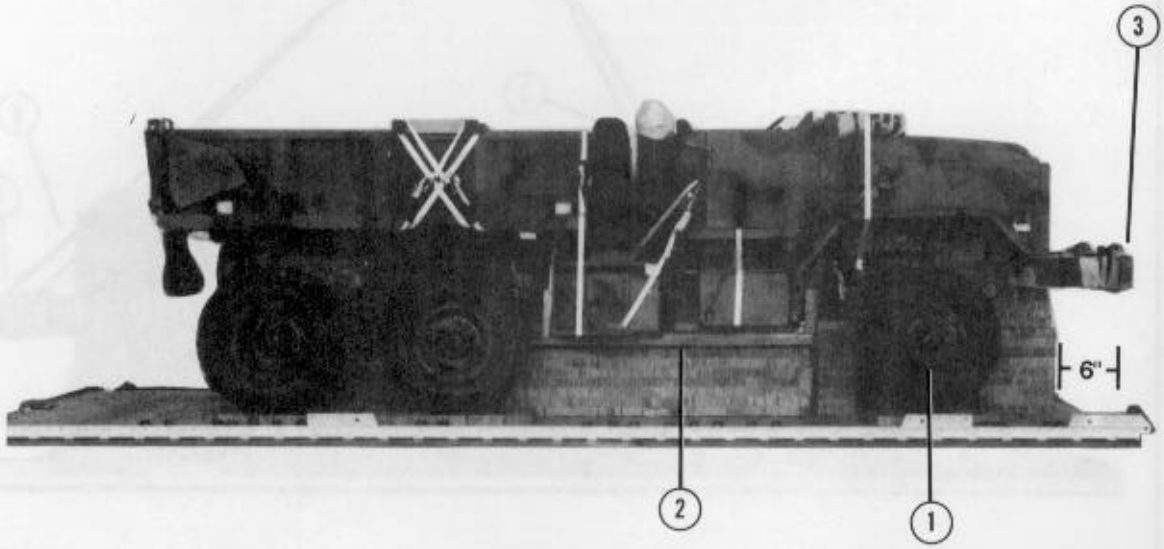
(3) Attach the end of a 20-foot (4-loop), type XXVI nylon webbing sling to a front lifting shackle with a large clevis.

(4) Install another sling on the other side of the truck as described in step 3 above.

Note: After slings are attached to the truck and the lifting device, place the transmission lever in neutral and release the brakes.

Figure 9-29. Lifting slings installed

Note: The honeycomb may need to be adjusted slightly when the truck is positioned on the stacks.



Lift the truck with the lifting slings, and position it on the honeycomb stacks with:

(1) The front axle centered on stack 2.

(2) The frame support centered on stack 4.

(3) The front bumper overhanging the front of the platform by 6 inches.

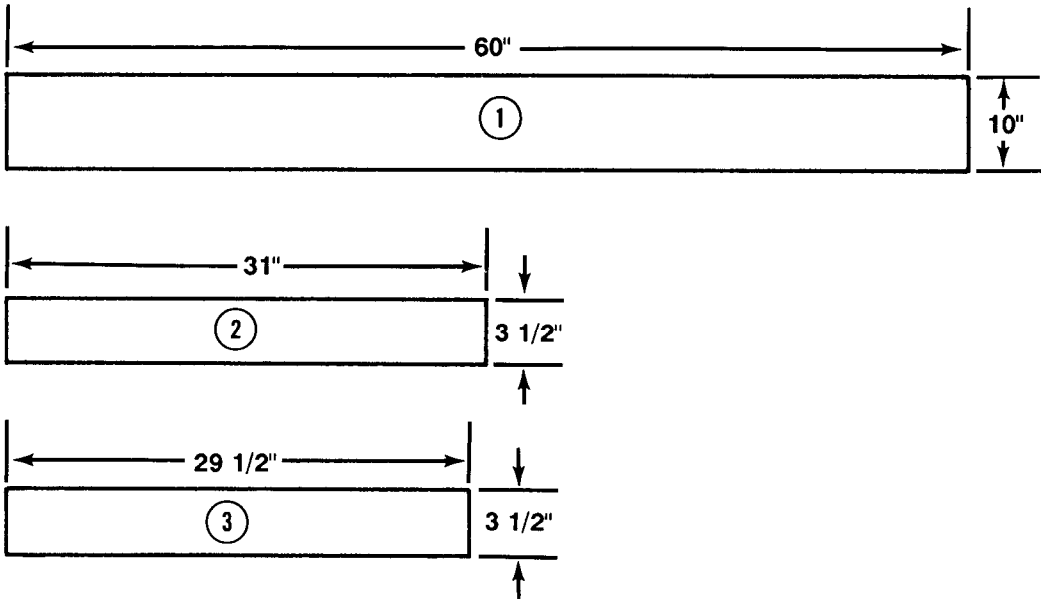
Note: After the truck is positioned, remove the lifting slings.

Figure 9-30. Truck positioned

9-10. Constructing and Installing Front Suspension Sling Spreaders

Construct the front suspension sling spreaders as shown in Figures 9-31 through 9-34. Install the front suspension sling spreaders as shown in Figure 9-35.

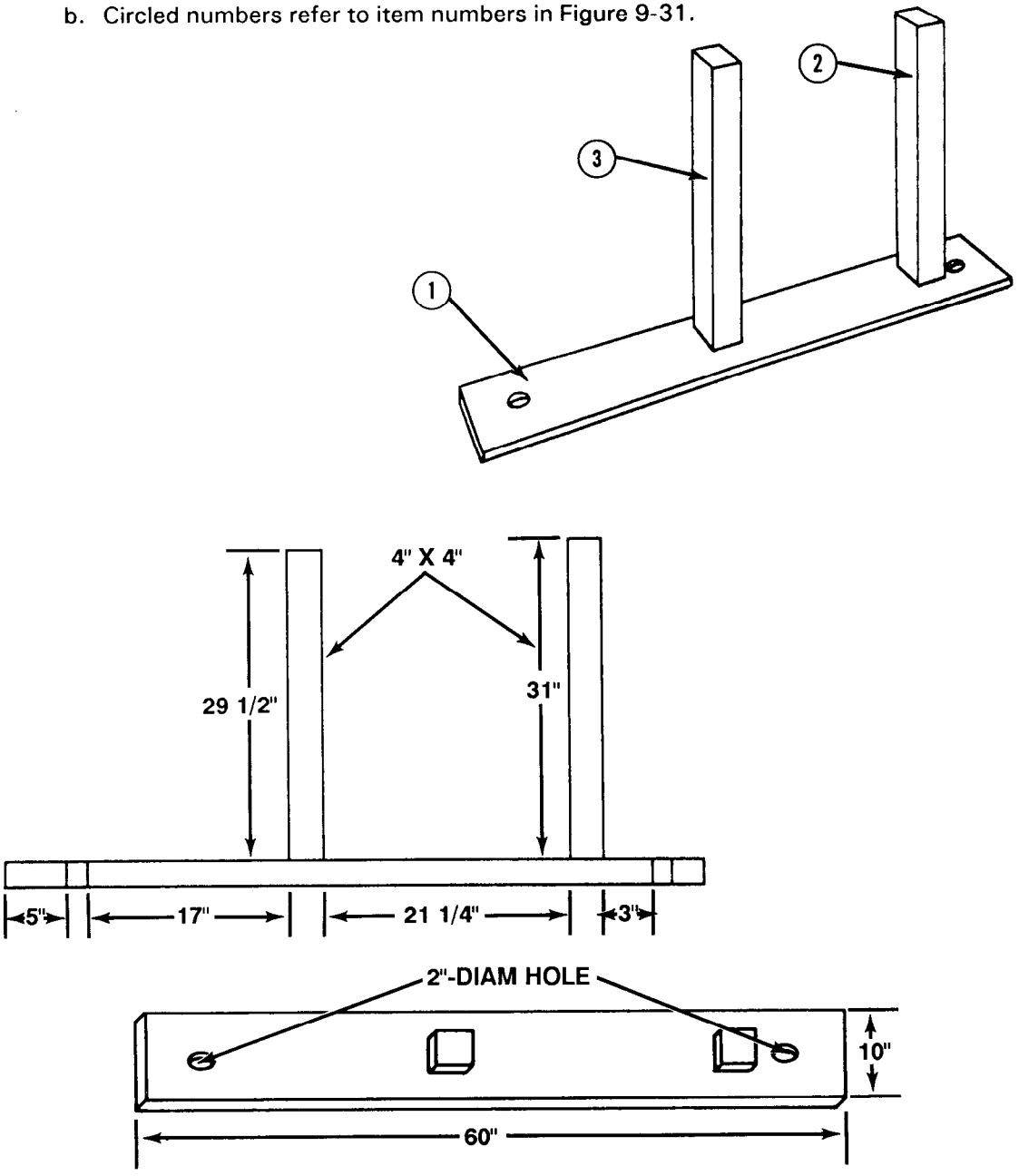
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	1 3/4 (actual)	60	2- by 10-inch lumber
2	1	3 1/2 (actual)	31	4- by 4-inch lumber
3	1	3 1/2 (actual)	29 1/2	4- by 4-inch lumber

Figure 9-31. Material required for the left front suspension sling spreader

Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-31.

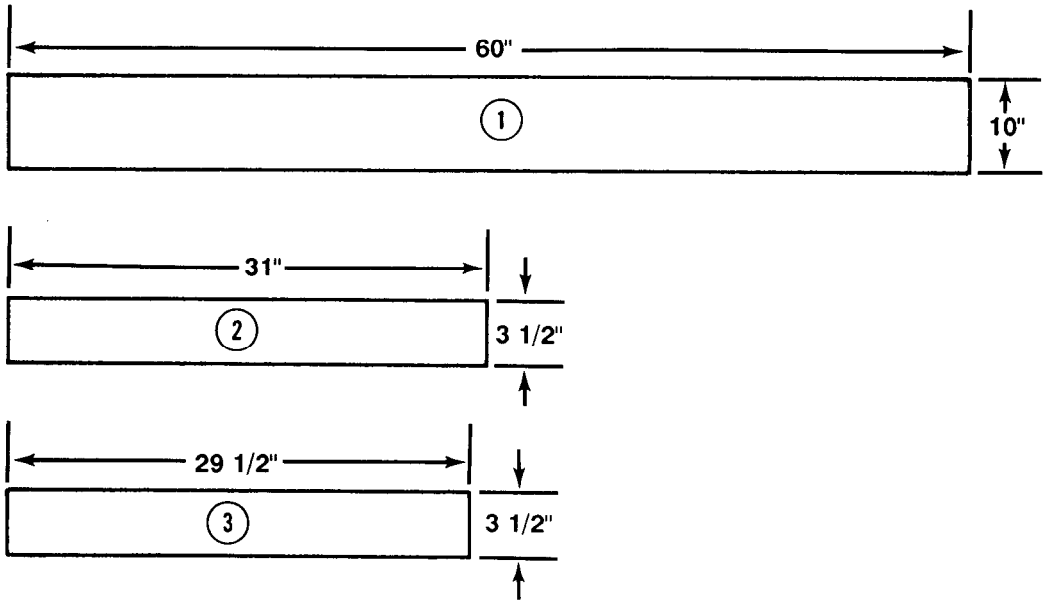


Step:

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

Figure 9-32. Left front suspension sling spreader constructed

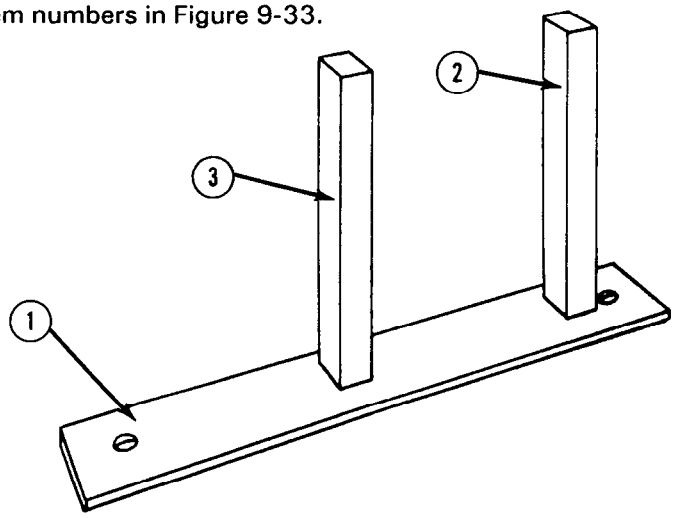
Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers.

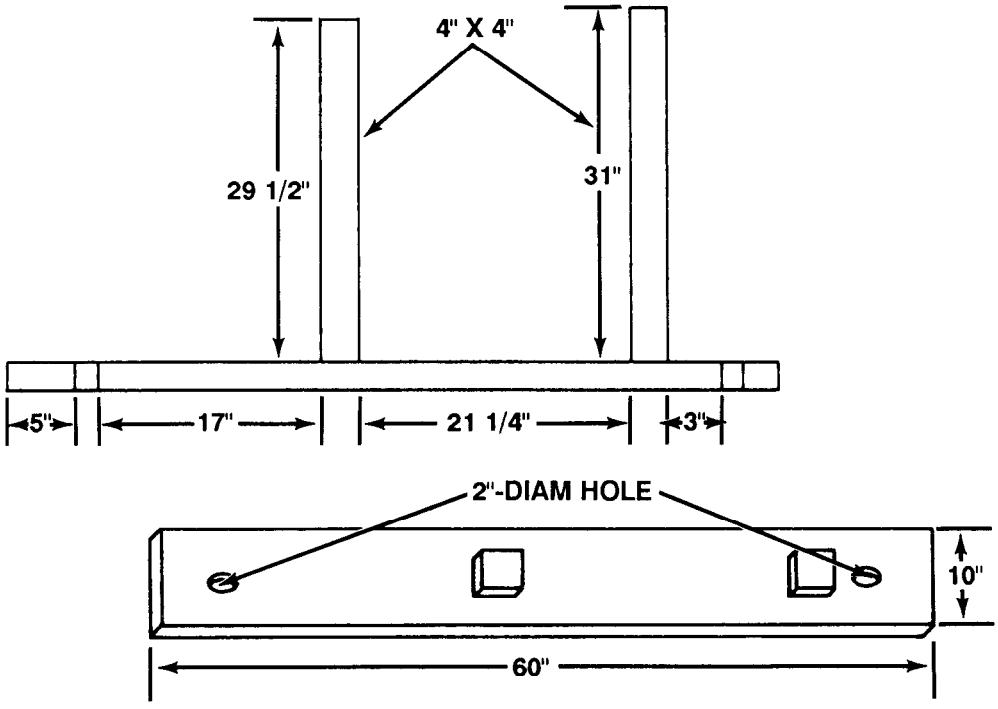


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	1 3/4 (actual)	60	2- by 10-inch lumber
2	1	3 1/2 (actual)	31	4- by 4-inch lumber
3	1	3 1/2 (actual)	29 1/2	4- by 4-inch lumber

Figure 9-33. Material required for the right front suspension sling spreader

Notes: a. These drawings are not drawn to scale.
b. Circled numbers refer to item numbers in Figure 9-33.

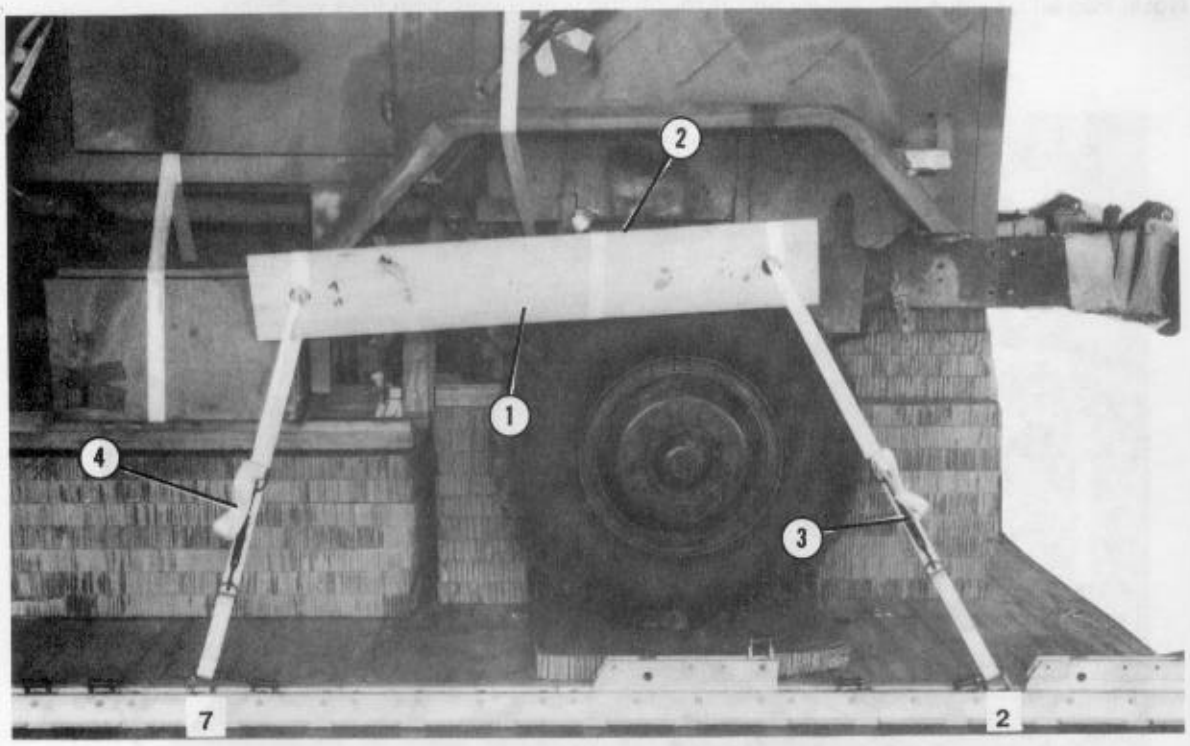




Step:

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

Figure 9-34. Right front suspension sling spreader constructed



(1) Position the right front suspension sling spreader against the mainframe of the truck as shown.

(2) Pass the free end of a 15-foot tiedown strap around the mainframe and around the 2- by 10-inch portion of the sling spreader. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

(3) Pass a 15-foot tiedown strap through the front hole of the spreader to clevis 2 on the right side of the truck. Secure the strap according to FM 10-500-2/TO 13C7-1-5.

(4) Pass a 15-foot tiedown strap through the rear hole of the spreader to clevis 7 on the right side of the truck. Secure the strap according to FM 10-500-2/TO 13C7-1-5.

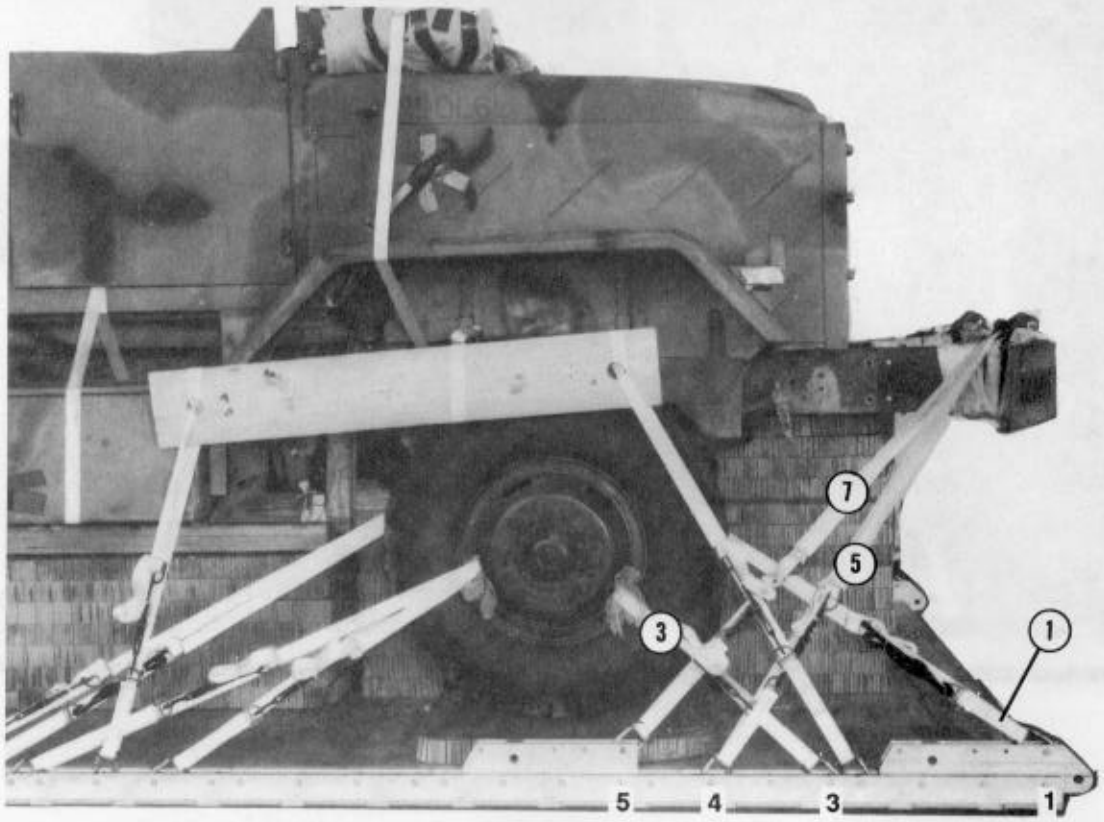
(5) Adapt the procedures in steps 1 through 4 above to install the left front suspension sling spreader to tiedown clevises 2A and 7A (not shown).

Figure 9-35. Front suspension sling spreaders installed

9-11. Installing Lashings

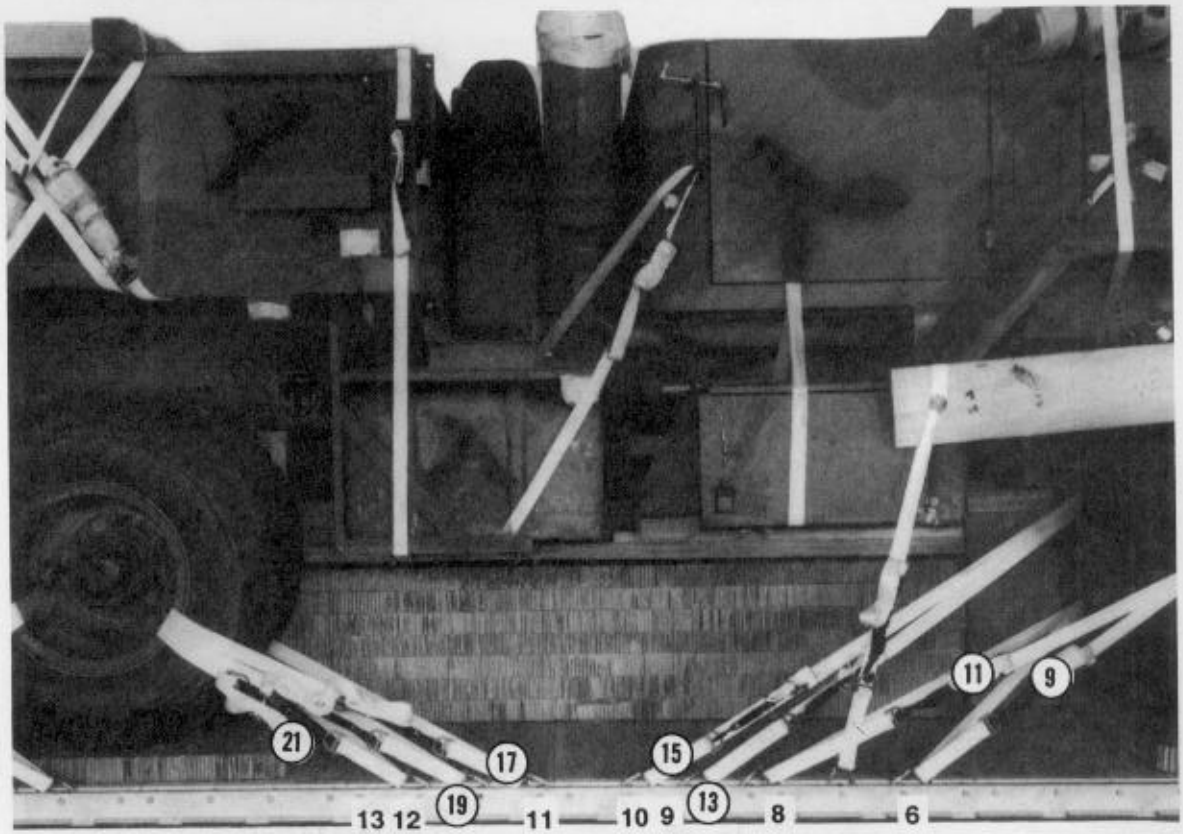
Lash the truck to the platform using forty 15-foot tiedown assemblies as shown in Figures 9-36 through 9-39. Secure the ends of the lashings according to FM 10-500-2/TO 13C7-1-5.

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



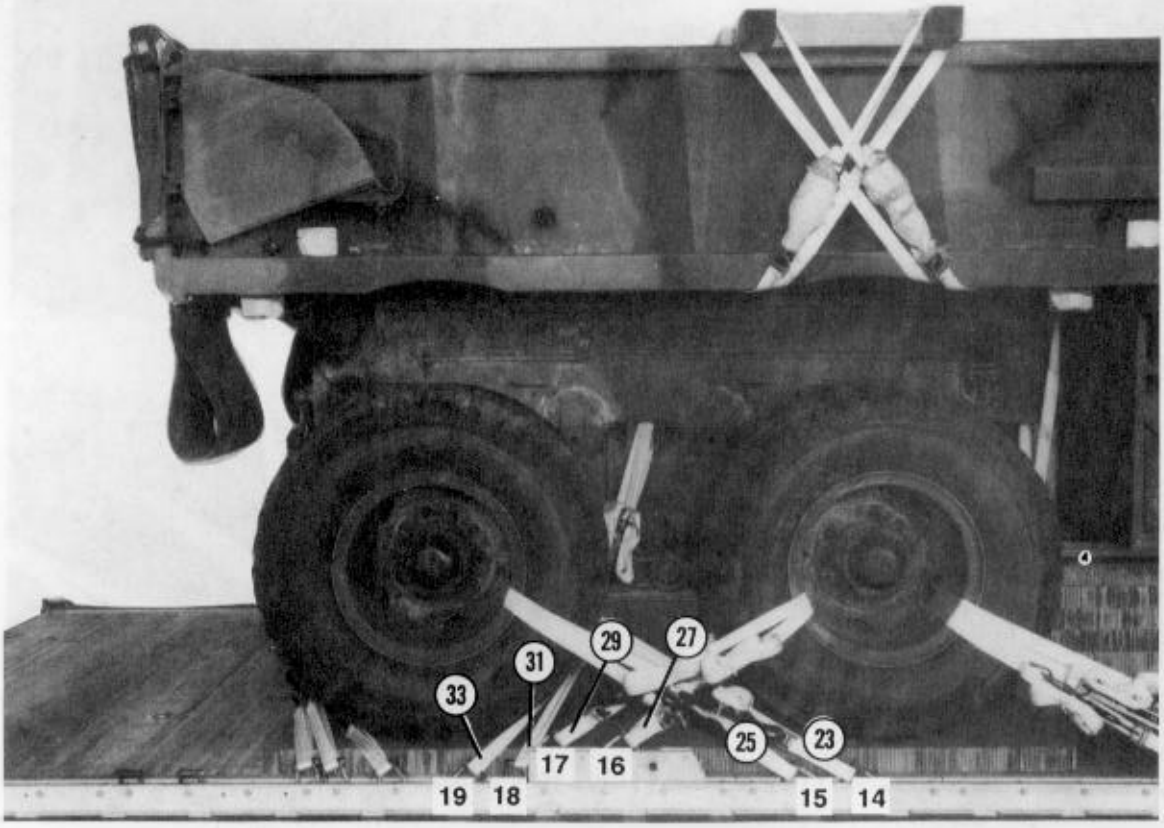
Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
1	1	Through the tiedown ring on the right mainframe.
2	1A	Through the tiedown ring on the left mainframe.
3	3	Through the front wheel, right side.
4	3A	Through the front wheel, left side.
5	4	Through the front lifting shackle, right side.
6	4A	Through the front lifting shackle, left side.
7	5	Through the front lifting shackle, right side.
8	5A	Through the front lifting shackle, left side.

Figure 9-36. Lashings 1 through 8 installed



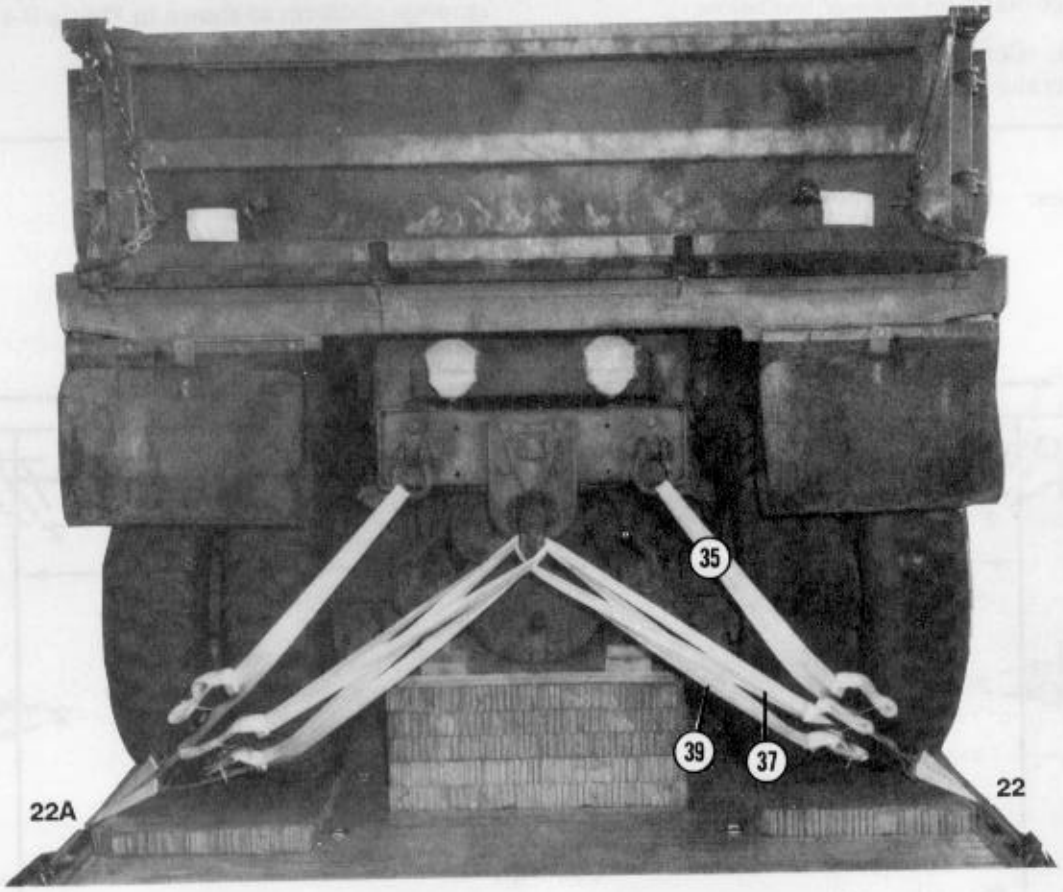
Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
9	6	Through the front wheel, right side.
10	6A	Through the front wheel, left side.
11	8	Through the front wheel, right side.
12	8A	Through the front wheel, left side.
13	9	Through the tiedown ring on the right mainframe.
14	9A	Through the tiedown ring on the left mainframe.
15	10	Through the tiedown ring on the right mainframe.
16	10A	Through the tiedown ring on the left mainframe.
17	11	Through the front outside dual wheel, right side.
18	11A	Through the front outside dual wheel, left side.
19	12	Through the front outside dual wheel, right side.
20	12A	Through the front outside dual wheel, left side.
21	13	Through the front outside dual wheel, right side.
22	13A	Through the front outside dual wheel, left side.

Figure 9-37. Lashings 9 through 22 installed



Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
23	14	Through the rear outside dual wheel, right side.
24	14A	Through the rear outside dual wheel, left side.
25	15	Through the rear outside dual wheel, right side.
26	15A	Through the rear outside dual wheel, left side.
27	16	Through the front outside dual wheel, right side.
28	16A	Through the front outside dual wheel, left side.
29	17	Through the front outside dual wheel, right side.
30	17A	Through the front outside dual wheel, left side.
31	18	Through the spring saddle, right side.
32	18A	Through the spring saddle, left side.
33	19	Through the spring saddle, right side.
34	19A	Through the spring saddle, left side.

Figure 9-38. Lashings 23 through 34 installed



Lashing Number	Tiedown Clevis Number	Instructions
		Pass lashing:
35	20	Through the lifting shackle, right side.
36	20A	Through the lifting shackle, left side.
37	21	Through the towing pintle.
38	21A	Through the towing pintle.
39	22	Through the towing pintle.
40	22A	Through the towing pintle.

Figure 9-39. Lashings 35 through 40 installed

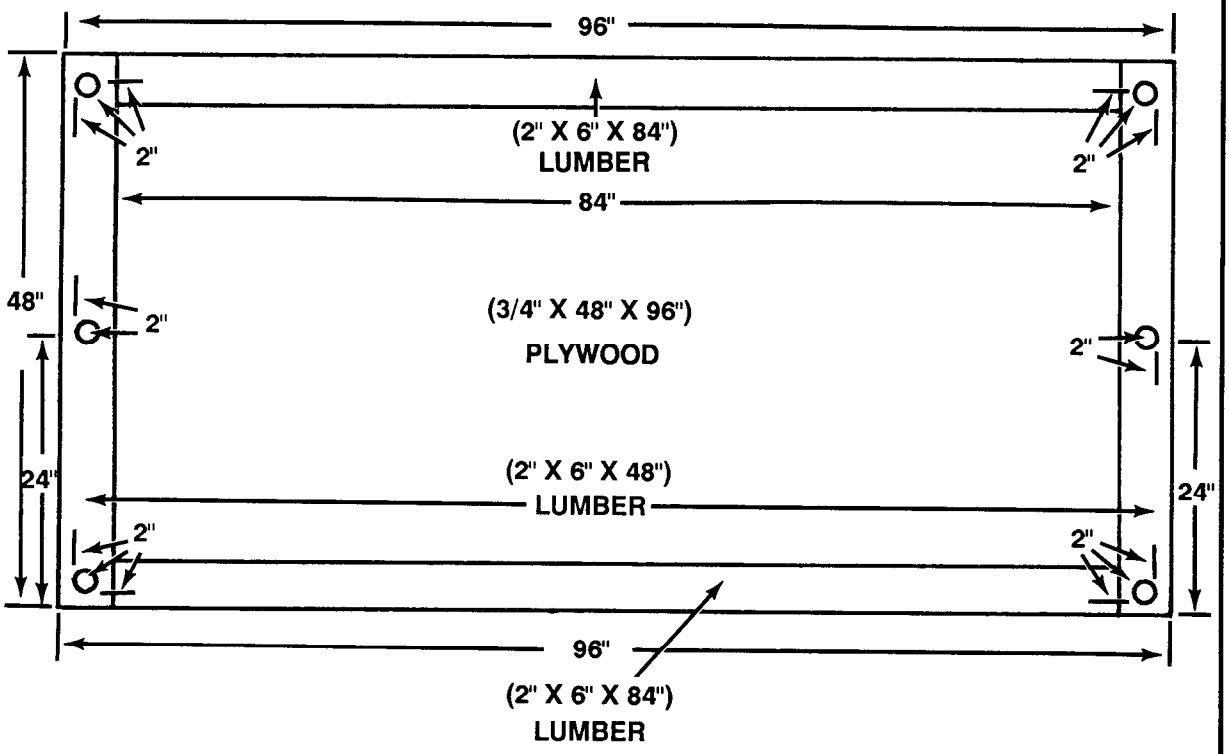
9-12. Constructing, Positioning, and Securing Parachute Stowage Platform

Construct, position, and secure the parachute stowage platform as described below.

a. Construct the parachute stowage platform as shown in Figure 9-40.

b. Position and secure the parachute stowage platform as shown in Figure 9-41.

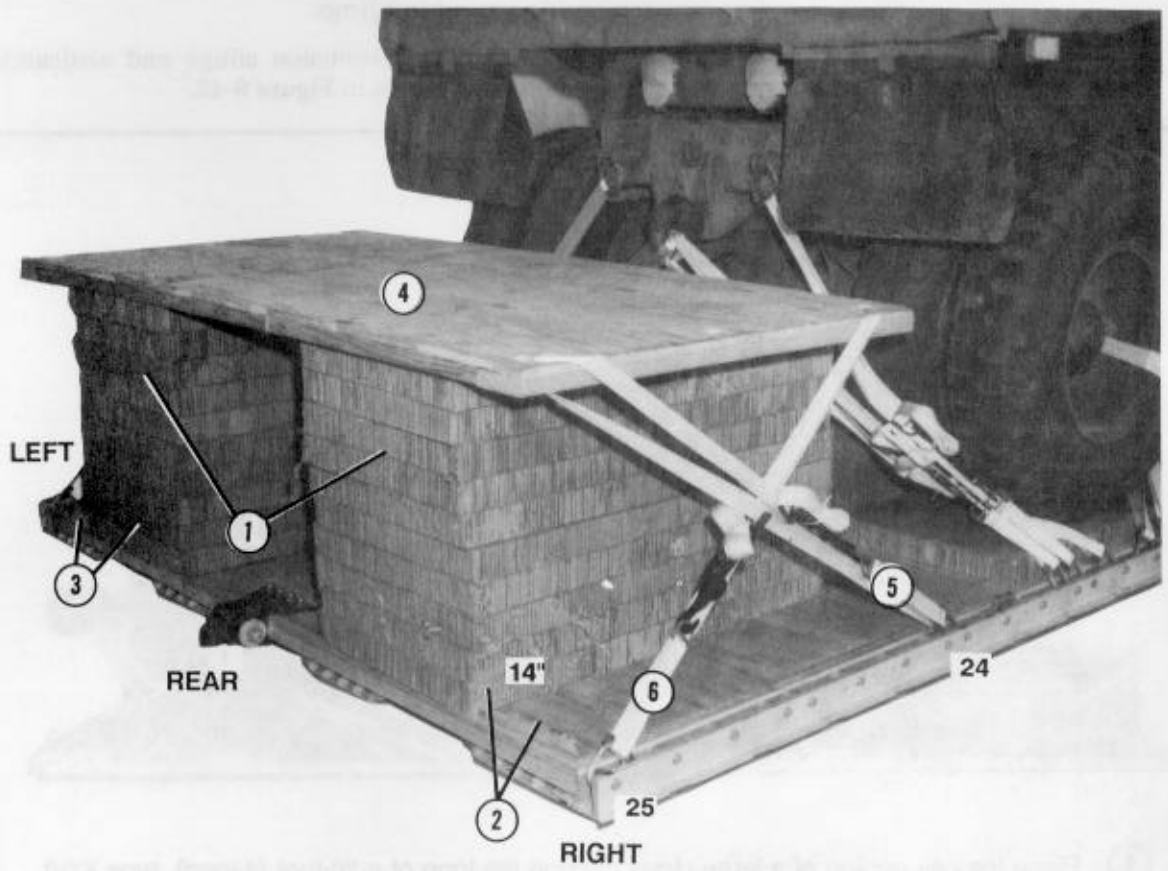
Notes: a. This drawing is not drawn to scale.
b. All dimensions are given in inches.



Step:

1. Construct the parachute stowage platform as shown.
2. Secure the lumber and plywood in place, as shown, with eightpenny nails.

Figure 9-40. Parachute stowage platform constructed

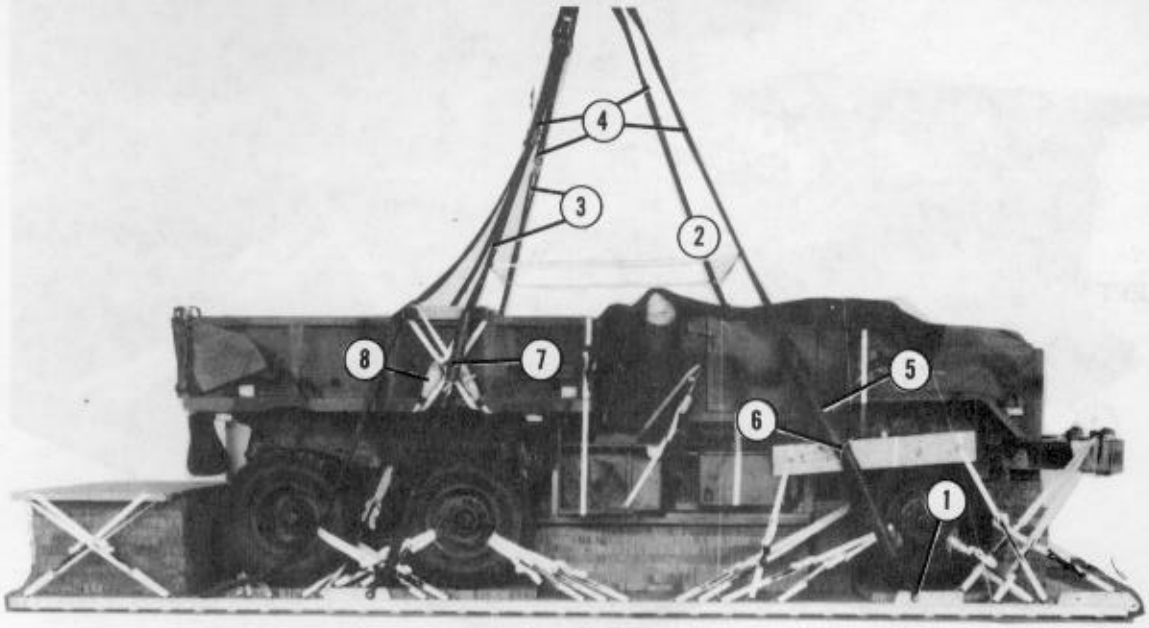


1. Construct two honeycomb stacks with ten 24- by 48-inch pieces in each stack (not shown).
2. Place one stack on the right side of the platform flush with the rear edge and with the right rear corner of the stack 14 inches from the right rail.
3. Place one stack on the left side of the platform flush with the rear edge and with the left rear corner of the stack 14 inches from the left rail.
4. Center the stowage platform on the honeycomb stacks.
5. Run a 15-foot tiedown strap through clevis 24 and up through the rear hole in the right side of the stowage platform. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
6. Run a 15-foot tiedown strap through clevis 25 and up through the front hole in the right side of the stowage platform. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
7. Lash the other side of the stowage platform in the same way using clevises 24A and 25A (not shown).

Figure 9-41. Parachute stowage platform positioned and secured

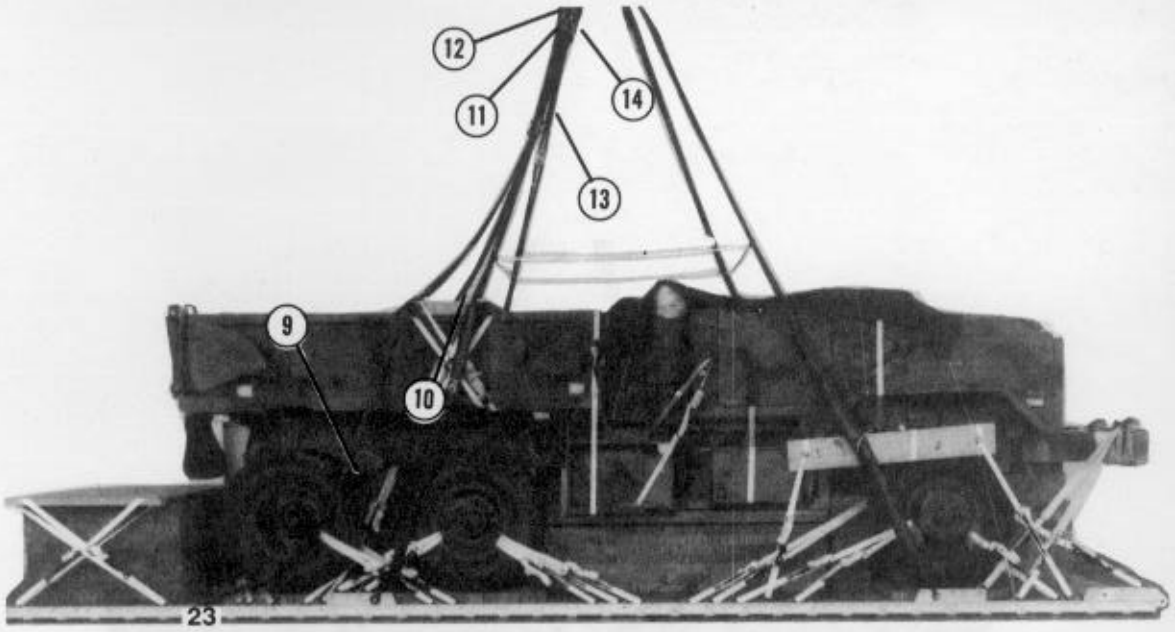
9-13. Installing Suspension Slings and Antitumble Slings

Install the suspension slings and antitumble slings as shown in Figure 9-42.



1. Place the bell portion of a large clevis through the loop of a 20-foot (4-loop), type XXVI nylon webbing sling. Bolt the clevis to the right front suspension link.
2. Use a 20-foot (4-loop), type XXVI nylon webbing sling, and install the left front suspension sling as described in step 1 above to the left front suspension link.
3. Using two 3-foot (4-loop), type XXVI nylon webbing slings, two 12-foot (4-loop), type XXVI nylon webbing slings, and a two-point link, adapt the procedures in steps 1 and 2 above and install the rear suspension slings to the rear suspension links.
4. Pull the suspension slings tight above the load.
5. Wrap a 15- by 36-inch piece of felt around each front suspension sling 6 inches from the large clevis. Tape the felt in place.
6. Tie each front suspension sling to the front suspension sling spreader with a turn of 1/2-inch tubular nylon webbing.
7. Wrap a 15- by 36-inch piece of felt around each rear suspension sling 48 inches from the large clevis. Tape the felt in place.
8. Tie each rear suspension sling to the side board ring tiedown with a single turn of 1/2-inch tubular nylon webbing.

Figure 9-42. Suspension slings and antitumble slings installed



(9) Install a 20-foot (2-loop), type XXVI nylon webbing sling (right antitumble sling) to clevis 23.

(10) Install a 20-foot (2-loop), type XXVI nylon webbing sling (left antitumble sling) to clevis 23A.

(11) Attach the free end of the right antitumble sling to the left outside bolt of a four-point link assembly.

(12) Attach the free end of the right rear suspension sling to the right outside bolt of the four-point link assembly.

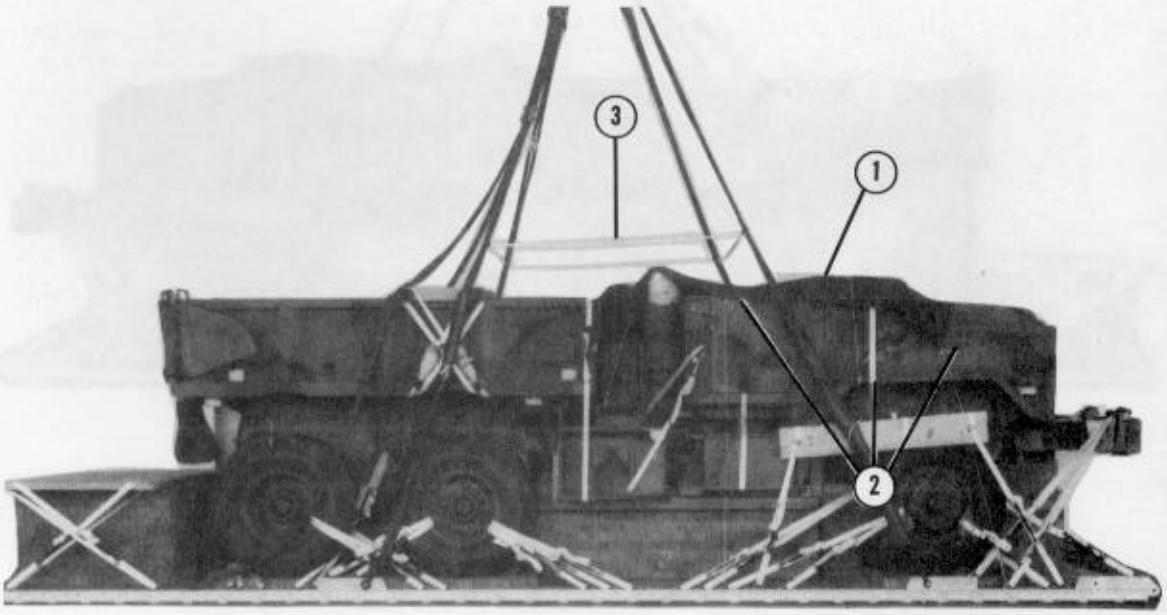
(13) Attach a 3-foot (4-loop), type XXVI nylon webbing sling to the top bolt of the four-point link assembly.

(14) Adapt the procedures in steps 11 through 13 above, and install a four-point link assembly and 3-foot sling on the left side of the load.

Figure 9-42. Suspension slings and antitumble slings installed (continued)

9-14. Installing Load Cover and Deadman's Tie

Install the load cover and deadman's tie as shown in Figure 9-43.



(1) Place a 12- by 12-foot piece of duck cloth (load cover) over the cab of the truck.

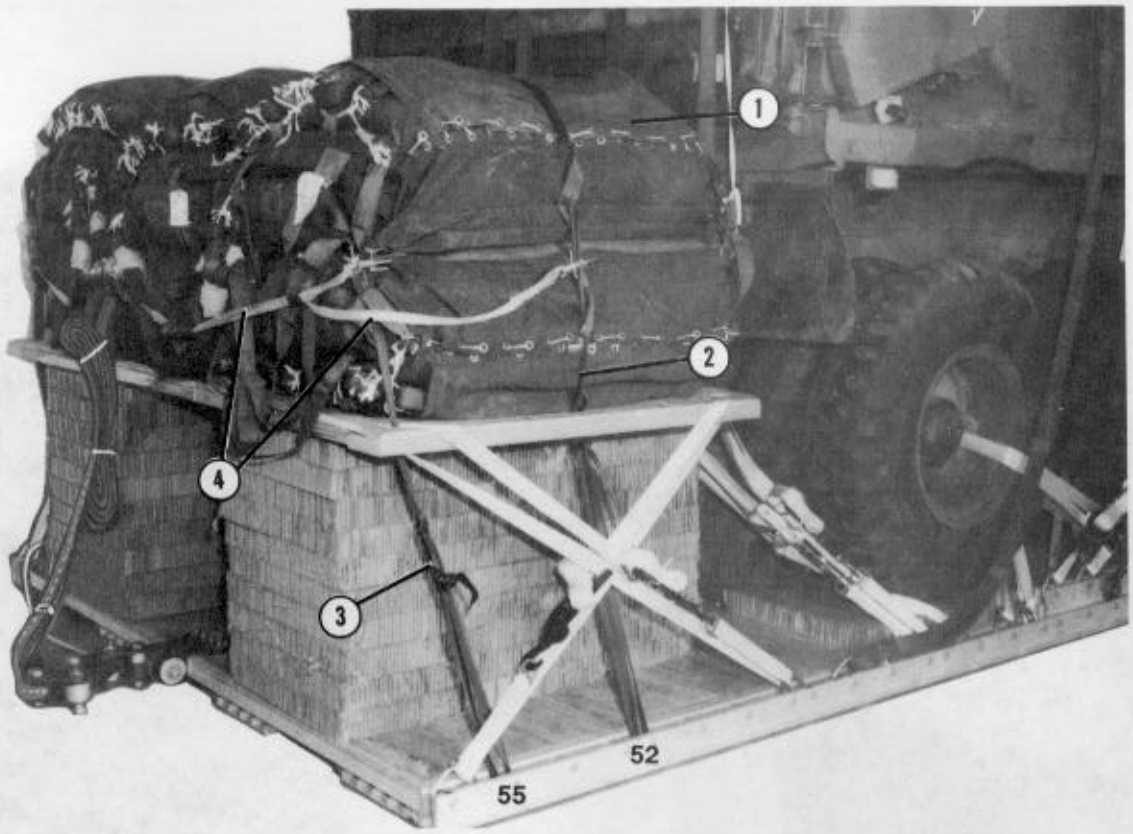
(2) Tie the load cover in place with ties of type III nylon cord.

(3) Install a deadman's tie according to FM 10-500-2/TO 13C7-1-5.

Figure 9-43. Load cover and deadman's tie installed

9-15. Stowing Cargo Parachutes

Stow six G-11B cargo parachutes on the stowage platform as shown in Figure 9-44.



(1) Prepare and position six G-11B cargo parachutes on the stowage platform as shown. Each parachute requires a 120-foot (2-loop), type XXVI nylon riser extension. Make sure the riser extensions meet the requirements and restrictions in FM 10-500-2/TO 13C7-1-5.

(2) Install a 10-yard, type VIII nylon webbing parachute restraint strap on top and over the cargo parachutes according to the procedures in FM 10-500-2/TO 13C7-1-5. Pass the ends of the strap through bushings 52 and 52A and secure the strap according to FM 10-500-2/TO 13C7-1-5.

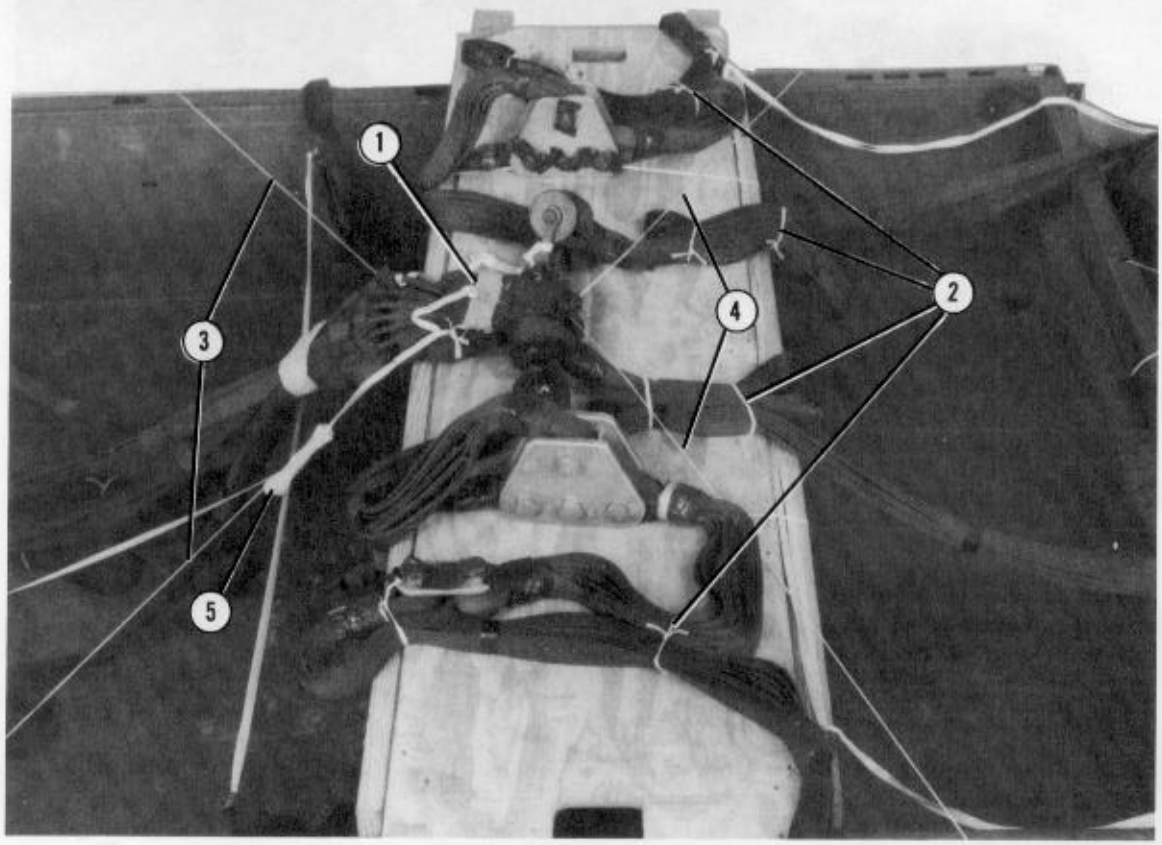
(3) Install a 10-yard, type VIII nylon webbing parachute restraint strap on the rear of the load to the parachutes according to the procedures in FM 10-500-2/TO 13C7-1-5. Pass the ends of the strap through bushings 55 and 55A and secure the strap according to FM 10-500-2/TO 13C7-1-5.

(4) Install two multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

Figure 9-44. Six G-11B cargo parachutes installed

9-16. Installing Release System

Prepare and install the release system as shown in Figure 9-45.



(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.

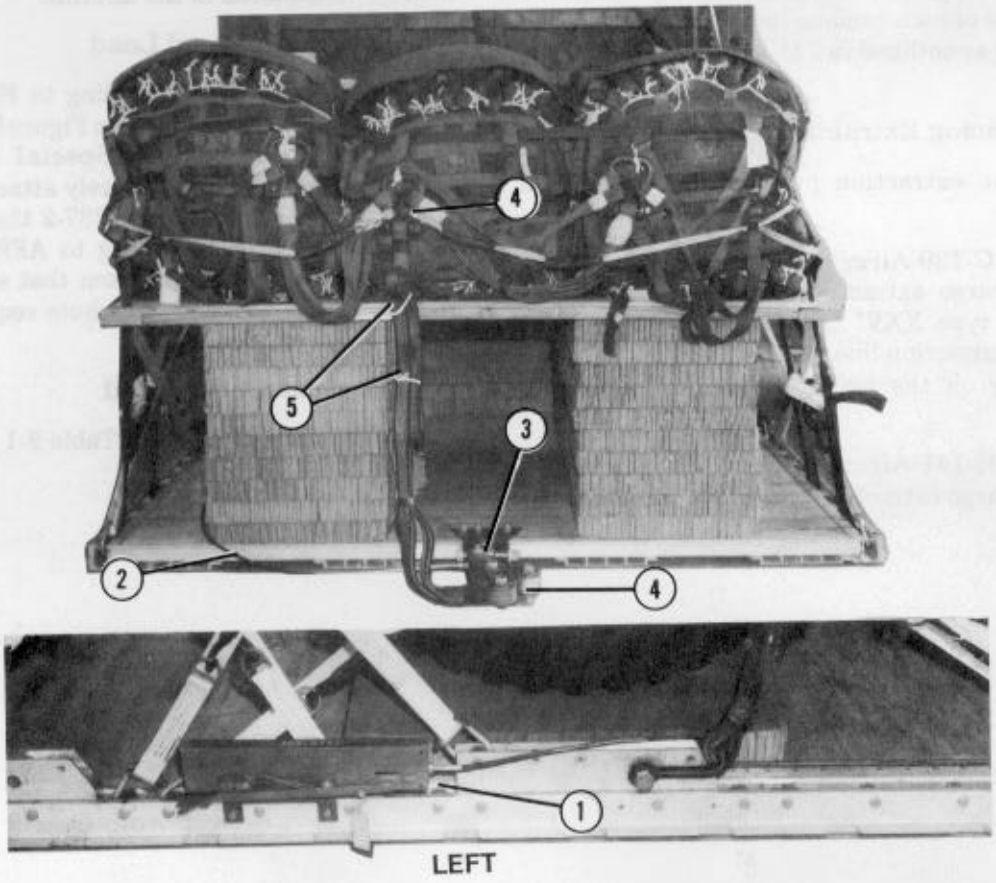
(5) Install the arming lanyard according to FM 10-500-2/TO 13C7-1-5.

Note: The arming lanyard MUST be modified to 20 feet to reach the parachutes.

Figure 9-45. Release system installed

9-17. Installing Extraction System

Install the EFTC extraction system as shown in Figure 9-46.



(1) Attach the type V EFTA mounting brackets to the front mounting holes in the left platform rail.

(2) Install the actuator with a 28-foot cable to the EFTA mounting brackets according to FM 10-500-2/TO 13C7-1-5.

(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 with the locking nut hole facing 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 9-46. Extraction system installed

9-18. 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 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.

9-19. Placing Extraction Parachute

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

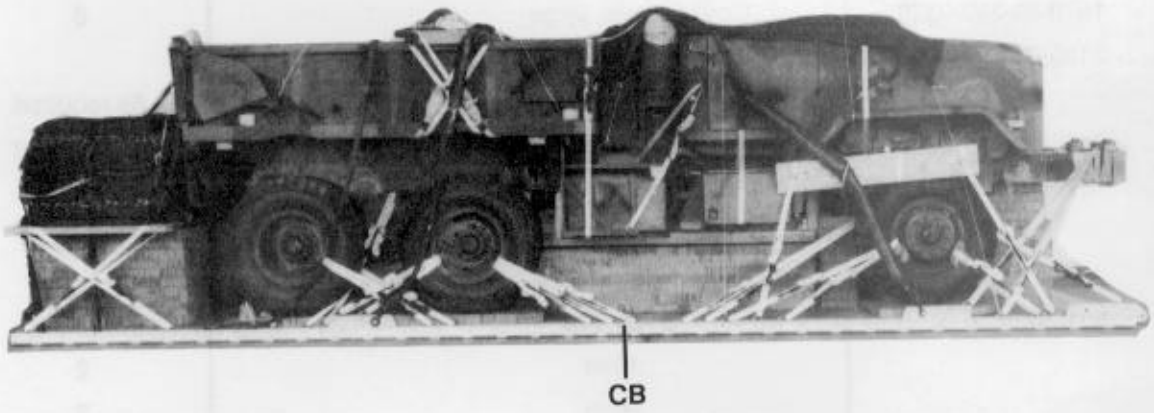
9-20. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 9-47. 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.

9-21. Equipment Required

Use the equipment listed in Table 9-1 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	30,260 pounds
Maximum load allowed	30,760 pounds
Height	98 inches
Width	108 inches
Length	367 inches
Overhang: Front	.6 inches
Rear	25 inches
CB (from front edge of platform)	133 inches
Extraction System	EFTC

Figure 9-47. M929, 5-ton dump truck rigged for low-velocity airdrop on a type V platform

Table 9-1. Equipment required for rigging the M929, 5-ton dump truck for low- velocity airdrop on a type V airdrop platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1670-01-035-6054	Bridle, extraction line bag (Use w extraction line leaf.)	1
4030-00-090-5354	Clevis, suspension, 1-in (large)	15
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-360-0328	Cover, clevis, large	6
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-958-3685	Felt, 1/2-in thick	As required
1670-00-573-6790	Frame extension assembly	2
	Frame support:	
	Lumber:	
5510-00-220-6146	2- by 4-in:	
	10-in	2
	20-in	2
	26-in	2
5510-00-220-6448	2- by 6- by 26-in	1
5510-00-220-6274	4- by 4-in:	
	10-in	8
	10 3/4-in	1
	33-in	2
	96-in	2
5530-00-128-4981	Plywood, 3/4-in:	
	3 1/2- by 12 1/4-in	1
	3 1/2- by 13 1/2-in	8
	8 1/2- by 20-in	1
	13 1/2- by 13 1/2-in	3
	13 1/2- by 21 1/2-in	1
	36- by 96-in	1
1670-01-183-2678	Leaf, extraction line	1

Table 9-1. Equipment required for rigging the M929, 5-ton dump truck for low- velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	Line, extraction:	
1670-00-003-1959	60-ft (4-loop), type X nylon webbing	
	(for C-130 aircraft) or	1
1670-00-003-1957	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	3
	Two-point:	3
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(6)
5310-00-232-5165	Nut, 1-in	(6)
1670-00-003-1954	Plate, side, 5 1/2-in	(6)
5365-00-007-3414	Spacer, large	(6)
1670-01-247-2389	Link, suspension	4
	Load spreader for honeycomb stack 2:	
5510-00-220-6146	Lumber, 2- by 4- by 8-in	6
5510-00-220-6448	Lumber, 2- by 6- by 24-in	6
5530-00-128-4981	Plywood, 3/4- by 54- by 24-in	2
	Load spreader for honeycomb stack 3:	
5510-00-220-6146	Lumber, 2- by 4- by 36-in	1
5530-00-128-4981	Plywood, 3/4- by 36- by 12-in	3
	Load spreader for honeycomb stack 4:	
	Lumber:	
5510-00-220-6146	2- by 4- by 46-in	2
5510-00-220-6274	4- by 4- by 96-in	2
5530-00-128-4981	Plywood, 3/4-in:	
	4- by 96-in	2
	48- by 96-in	3
	Load spreader for honeycomb stack 5:	
	Lumber:	
5510-00-220-6146	2- by 4-in:	
	8-in	2

Table 9-1. Equipment required for rigging the M929, 5-ton dump truck for low- velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	12-in	1
5510-00-220-6448	2- by 6- by 12-in	6
5530-00-128-4981	Plywood, 3/4-in:	
	6- by 12-in	1
	36- by 66-in	2
	Nail, steel wire, common:	
5315-00-010-4659	8d	As required
5315-00-010-4663	16d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	25 sheets
	8- by 96-in	(2)
	12- by 96-in	(6)
	18- by 9-in	(1)
	21- by 96-in	(1)
	24- by 24-in	(4)
	24- by 48-in	(10)
	24- by 96-in	(2)
	36- by 12-in	(9)
	36- by 24-in	(9)
	36- by 66-in	(5)
	54- by 24-in	(4)
	96- by 36-in	(9)
1670-01-016-7841	Parachute, cargo, G-11B	6
	Parachute, cargo extraction:	
1670-00-262-1797	28-ft or	1
1670-00-040-8135	28-ft, heavy-duty	1
	Platform, AD, type V, 28-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2372	Clevis assembly	(50)
1670-01-162-2376	Extraction bracket assembly	(1)

Table 9-1. Equipment required for rigging the M929, 5-ton dump truck for low- velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
1670-01-162-2381	Tandem link	(2)
5530-00-128-4981	Plywood, 3/4-in:	5 sheets
	4- by 96-in	(2)
	6- by 12-in	(1)
	12- by 36-in	(3)
	24- by 54-in	(2)
	36- by 66-in	(2)
	48- by 96-in	(3)
1670-01-097-8817	Release, cargo parachute, M-2	1
	Sling, cargo airdrop:	
	For antitumble slings:	
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
	For deployment line:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	1
	For lifting:	
1670-00-432-2507	16-ft (4-loop), type XXVI nylon webbing or	2
1670-00-003-7237	16-ft (4-loop), type XXVI nylon webbing or	2
1670-01-062-6308	16-ft (4-loop), type XXVI nylon webbing	2
1670-01-064-4453	20-ft (4-loop), type XXVI nylon webbing	2
	For suspension:	
1670-00-432-2499	3-ft (4-loop), type XXVI nylon webbing or	2
1670-01-062-6306	3-ft (4-loop), type XXVI nylon webbing	2
1670-00-432-2506	12-ft (4-loop), type XXVI nylon webbing or	1
1670-01-062-6307	12-ft (4-loop), type XXVI nylon webbing	1
1670-01-064-4453	20-ft (4-loop), type XXVI nylon webbing or	2
1670-00-003-1956	20-ft (4-loop), type XXVI nylon webbing or	2
1670-00-432-2511	20-ft (4-loop), type XXVI nylon webbing	2
	For riser extensions:	
1670-01-062-63111	20-ft (2-loop), type XXVI nylon webbing	7
1670-00-432-24941	20-ft (3-loop), type X nylon webbing	7
1670-00-040-8219	Strap, parachute release, multicut comes w 3 knives	2

Table 9-1. Equipment required for rigging the M929, 5-ton dump truck for low- velocity airdrop on a type V airdrop platform (continued)

National Stock Number	Item	Quantity
	Suspension sling spreader:	
	Front, left:	
	Lumber:	
5510-00-220-6248	2- by 10- by 60-in	1
5510-00-220-6274	4- by 4-in:	
	29 1/2-in	1
	31-in	1
	Front, right:	
	Lumber:	
5510-00-220-6248	2- by 10- by 60-in	1
5510-00-220-6274	4- by 4- by 30 3/4-in	3
	Rear:	
	Lumber:	
5510-00-220-6274	4- by 4-in:	
	17-in	2
	88-in	2
5530-00-128-4981	Plywood, 3/4- by 48- by 80 3/4-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
8305-00-082-5752	Nylon, tubular, 1/2-in	As required