

CHAPTER 6

RIGGING M817 OR M51, 5-TON DUMP TRUCK ON A TYPE V PLATFORM

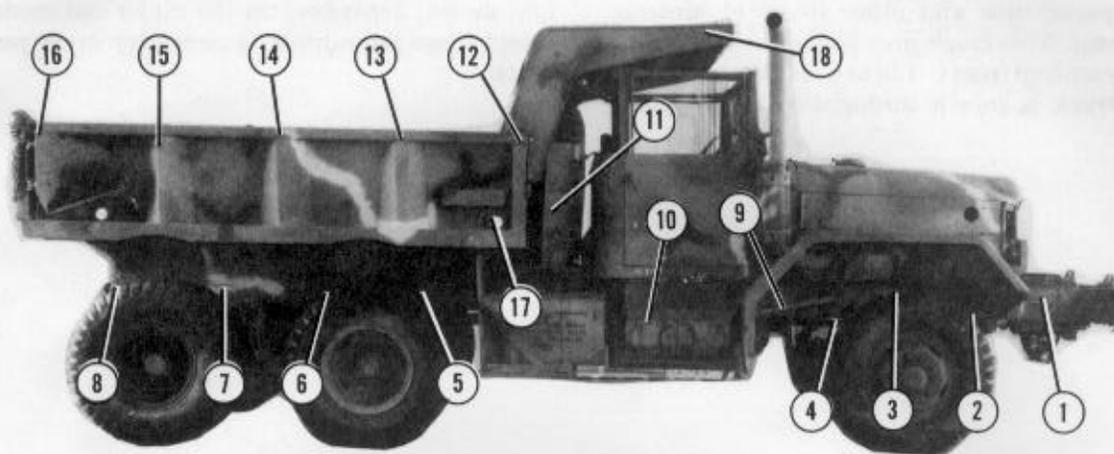
Section I

RIGGING TRUCK FOR LOW-VELOCITY AIRDROP

6-1. Description of Load

The M817 or M51, 5-ton dump truck is rigged on a 24-foot, type V airdrop platform with six G-11B cargo parachutes and other items of airdrop equipment. This truck may be delivered by low-velocity airdrop from C-130 or C-141 aircraft. The M817 truck is shown throughout this chapter.

Figure 6-1 shows the unrigged M817 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.



- | | | | |
|---|---------------------------|----|---------------------------|
| 1 | First tiedown provision | 10 | Toolbox |
| 2 | Second tiedown provision | 11 | Tool storage box |
| 3 | Third tiedown provision | 12 | First side rack socket |
| 4 | Fourth tiedown provision | 13 | Second side rack socket |
| 5 | Fifth tiedown provision | 14 | Third side rack socket |
| 6 | Sixth tiedown provision | 15 | Fourth side rack socket |
| 7 | Seventh tiedown provision | 16 | Fifth side rack socket |
| 8 | Eighth tiedown provision | 17 | Side body storage sockets |
| 9 | Fender brace | 18 | Cab shield |

Figure 6-1. Unrigged M817, 5-ton dump truck

6-2. 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 6-2 for the location of the suspension links.

b. Installing Suspension Links. Install the suspension links as described in Figure 6-2.

c. Installing Tandem Links. Install a tandem link on the front of each rail as shown in Figure 6-2.

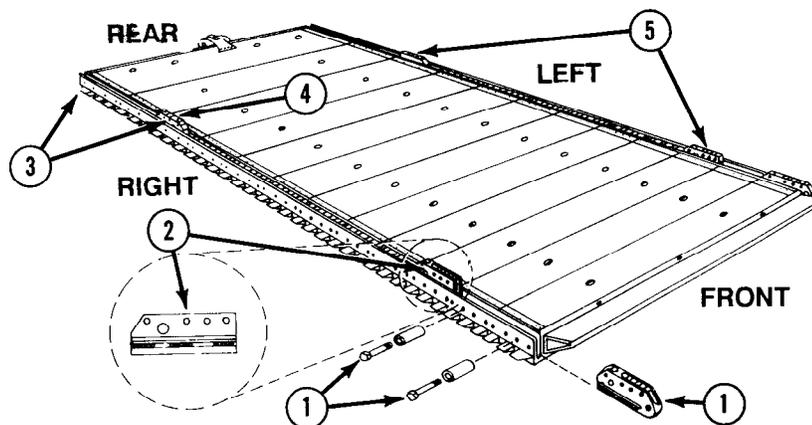
d. Attaching and Numbering Clevises. Attach and number 46 clevises as shown in Figure 6-3.

e. Labeling and Numbering Tiedown Rings. Label and number the tiedown rings as shown in Figure 6-3.

Notes:

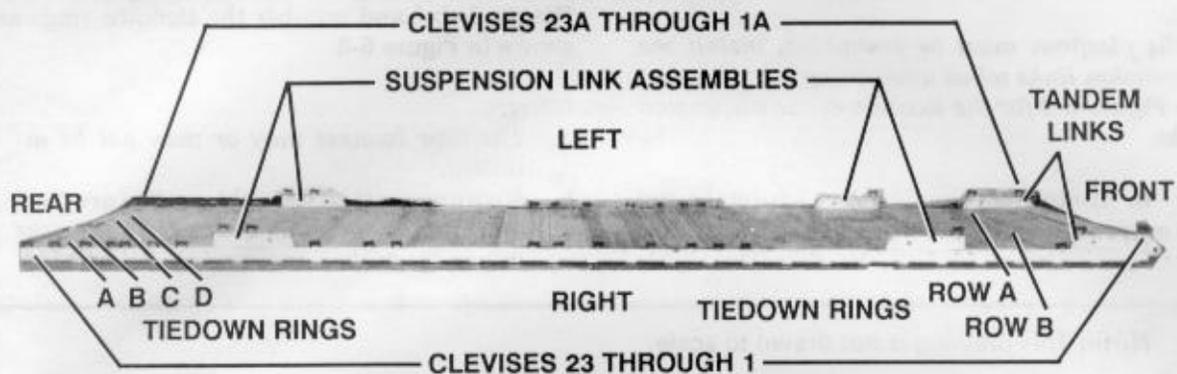
- a. The nose bumper may or may not be installed.*
- b. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.*

Note: This drawing is not drawn to scale.



- ① Remove bushings, bolts, and 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 tandem links that may have been installed in bushing 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 6-2. 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 4 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 cleaves on each platform side rail using the bushings bolted on holes 4, 18, 19, 20, 22, 24, 26, 27, 33, 34, 36, 42, 43, 44, 45, 46, 47, and 48.
6. Starting at the front of the platform, number the cleaves bolted to the right side from 1 through 23 and those bolted to the left side from 1A through 23A.
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 6-3. Platform prepared

6-3. Building and Positioning Honeycomb Stacks

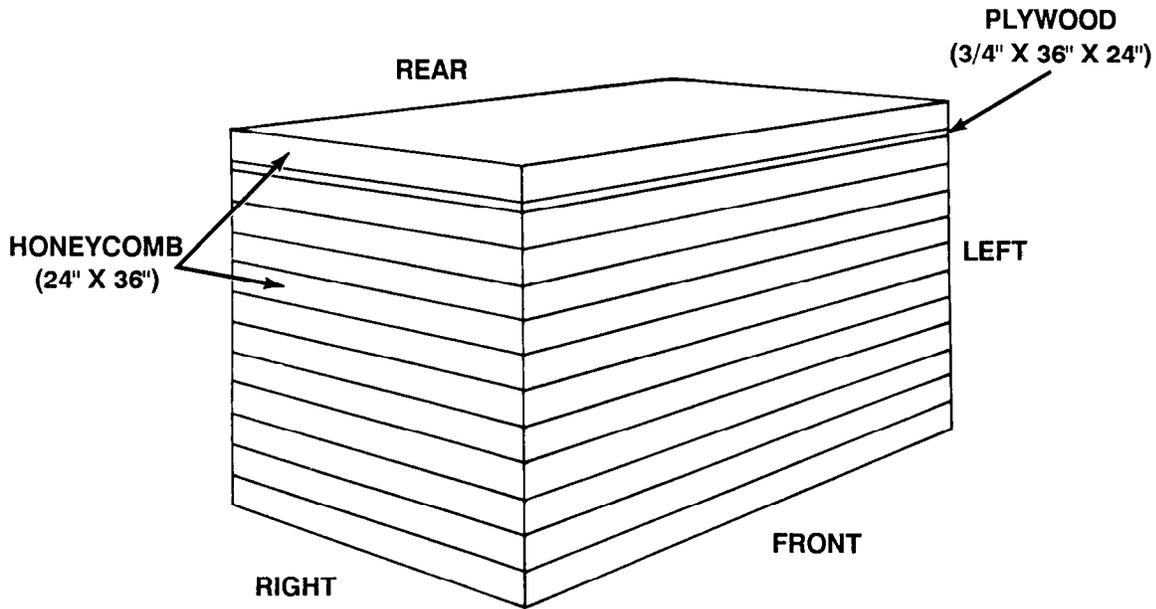
Build and position the honeycomb stacks as described below.

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

a. Build the honeycomb stacks as shown in Figures 6-4 through 6-11. Glue the layers of

b. Position the honeycomb stacks on the platform as shown in Figures 6-12 through 6-14.

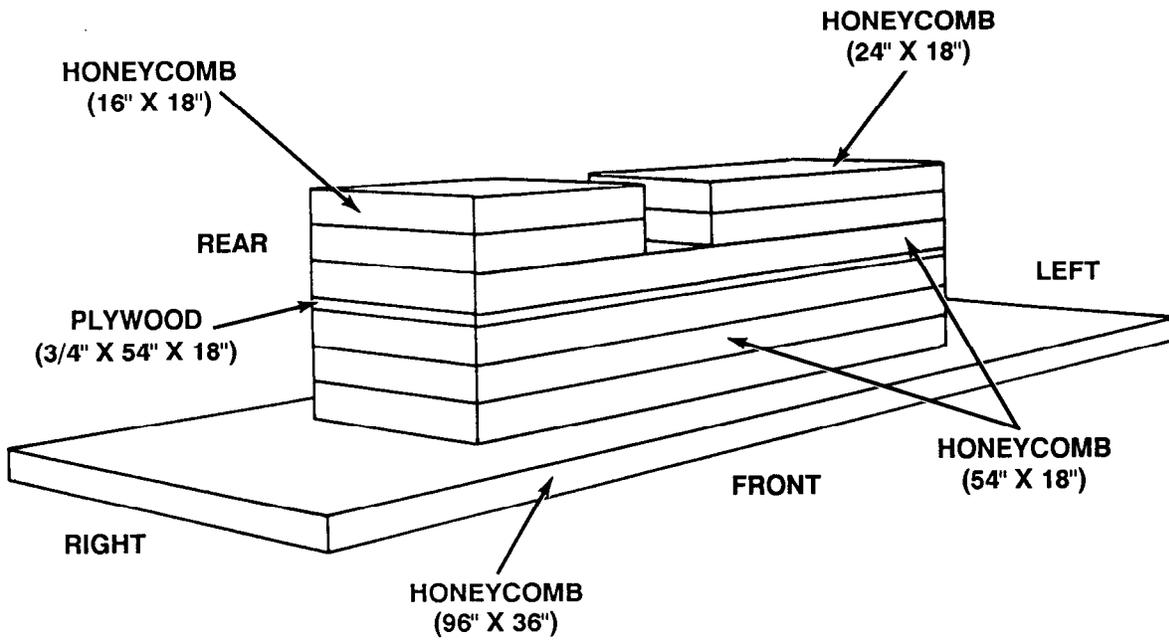
- Notes:**
- a. This drawing is not drawn to scale.
 - b. If the truck you are rigging is NOT equipped with a winch, one additional 36- by 24-inch layer of honeycomb must be placed on top of the stack.



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 6-4. Honeycomb stack 1 prepared

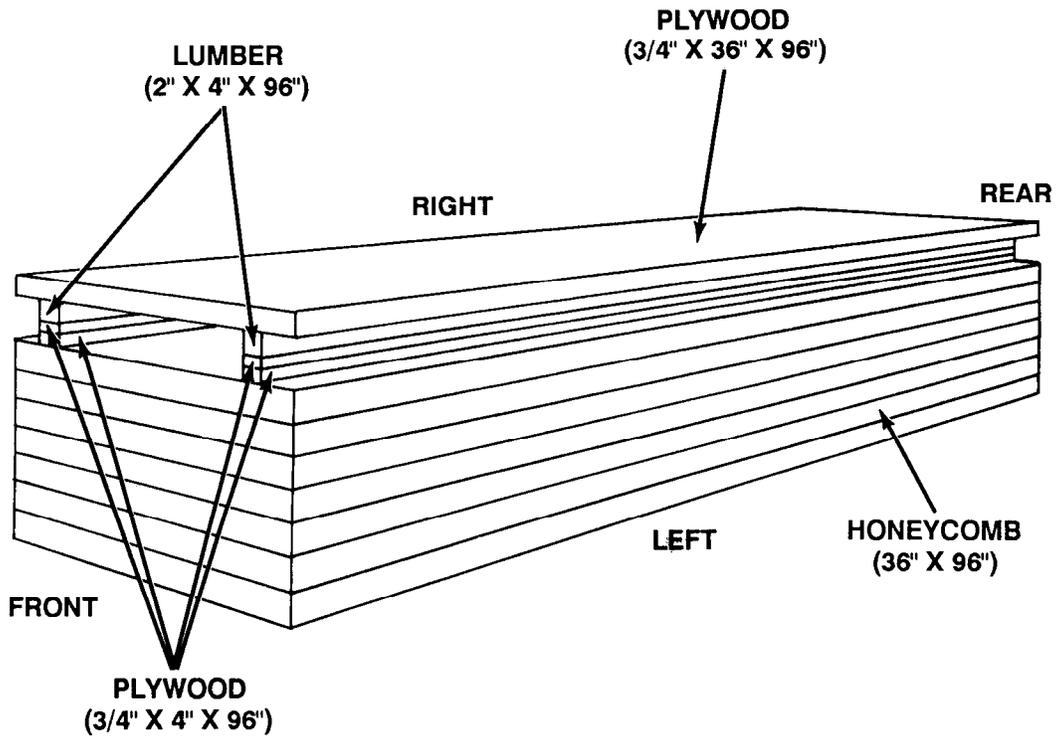
Note: This drawing is not drawn to scale.



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	24	18	Honeycomb	Place honeycomb on top of the 54- by 18-inch honeycomb, flush with the left side.
	2	16	18	Honeycomb	Place honeycomb on top of the 54- by 18-inch honeycomb, flush with the right side.

Figure 6-5. Honeycomb stack 2 prepared

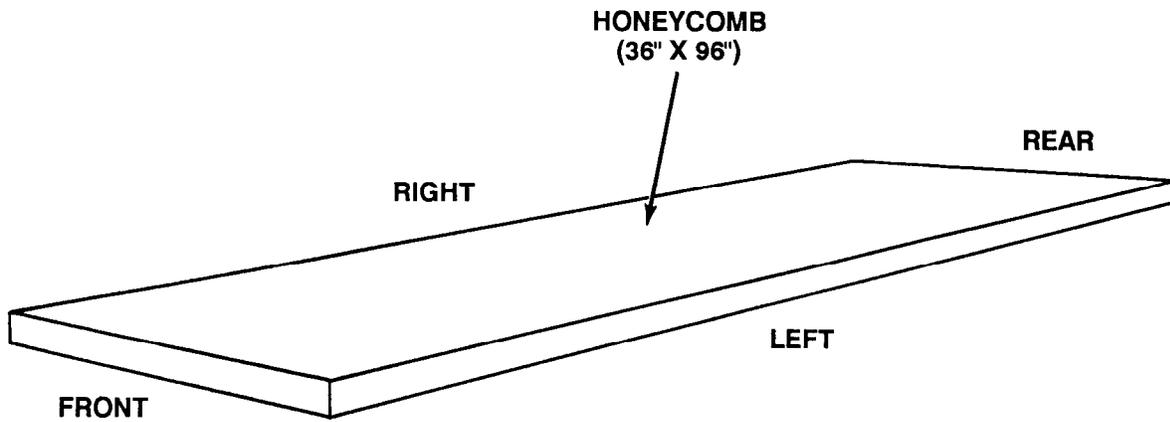
Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
3	7	36	96	Honeycomb	Place honeycomb as the base.
	4	4	96		
	2	3 1/2 (actual)	96	2- by 4- inch lumber	Place one piece of lumber on top of the plywood on each side.
	1	36	96	3/4-inch plywood	Center plywood on top of the lumber, over the honeycomb base.

Figure 6-6. Honeycomb stack 3 prepared

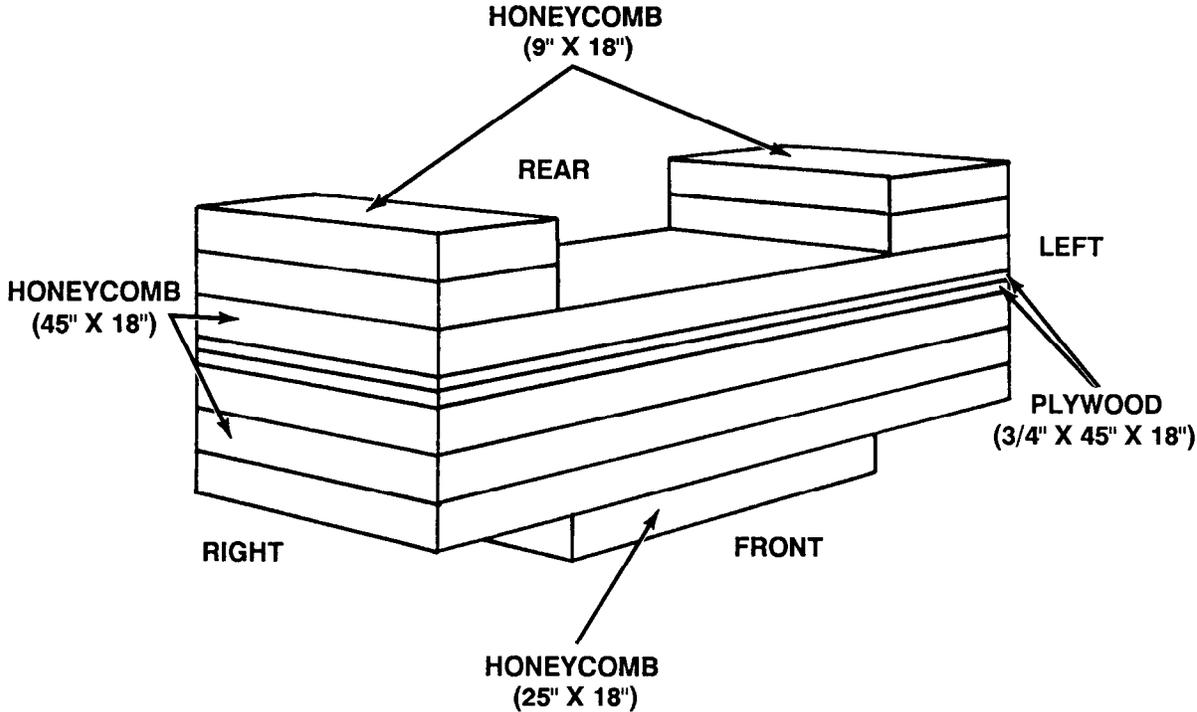
Note: This drawing is not drawn to scale.



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

Figure 6-7. Honeycomb stacks 4 and 5 prepared

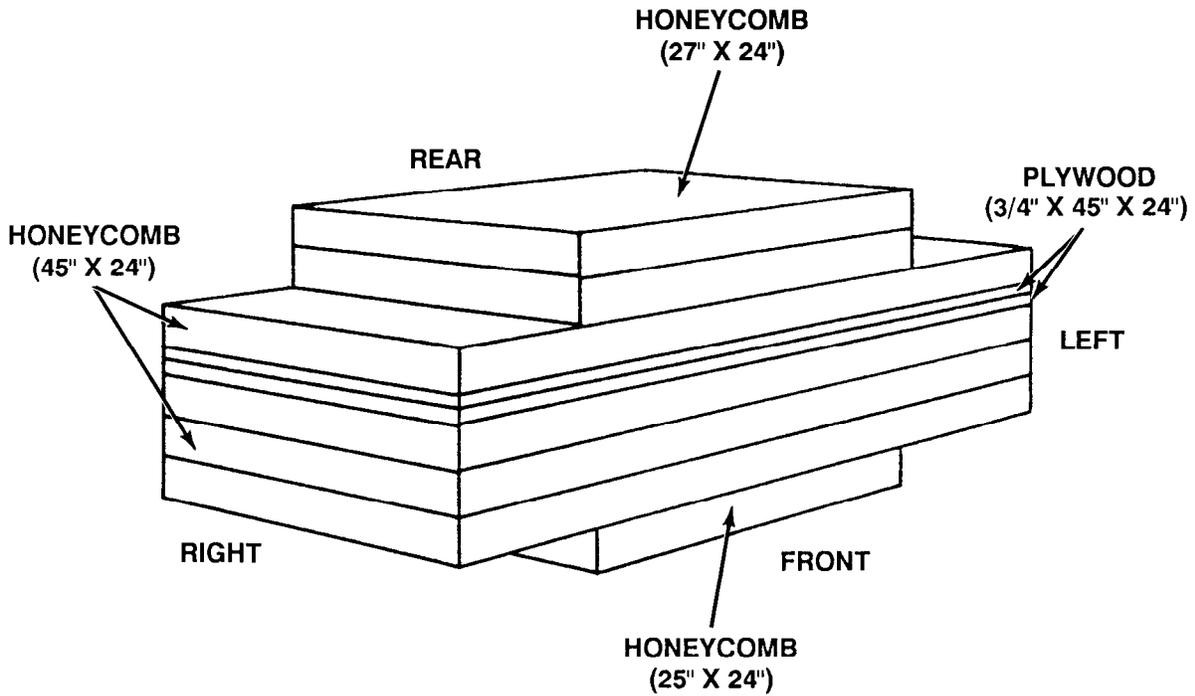
Note: This drawing is not drawn to scale.



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 honeycomb.
	1	45	18	Honeycomb	Place honeycomb on top of the plywood.
	4	9	18	Honeycomb	Place two pieces of honeycomb on top of the 45-by-18-inch honeycomb, flush with each side.

Figure 6-8. Honeycomb stack 6 prepared

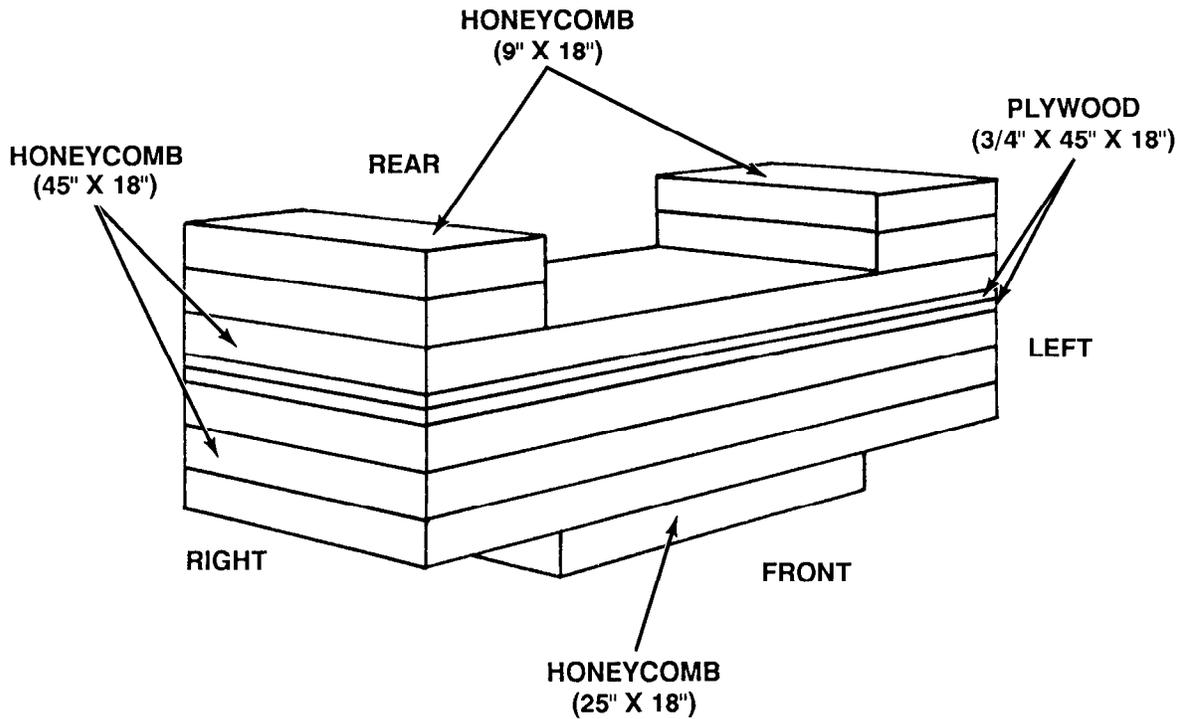
Note: This drawing is not drawn to scale.



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 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 6-9. Honeycomb stack 7 prepared

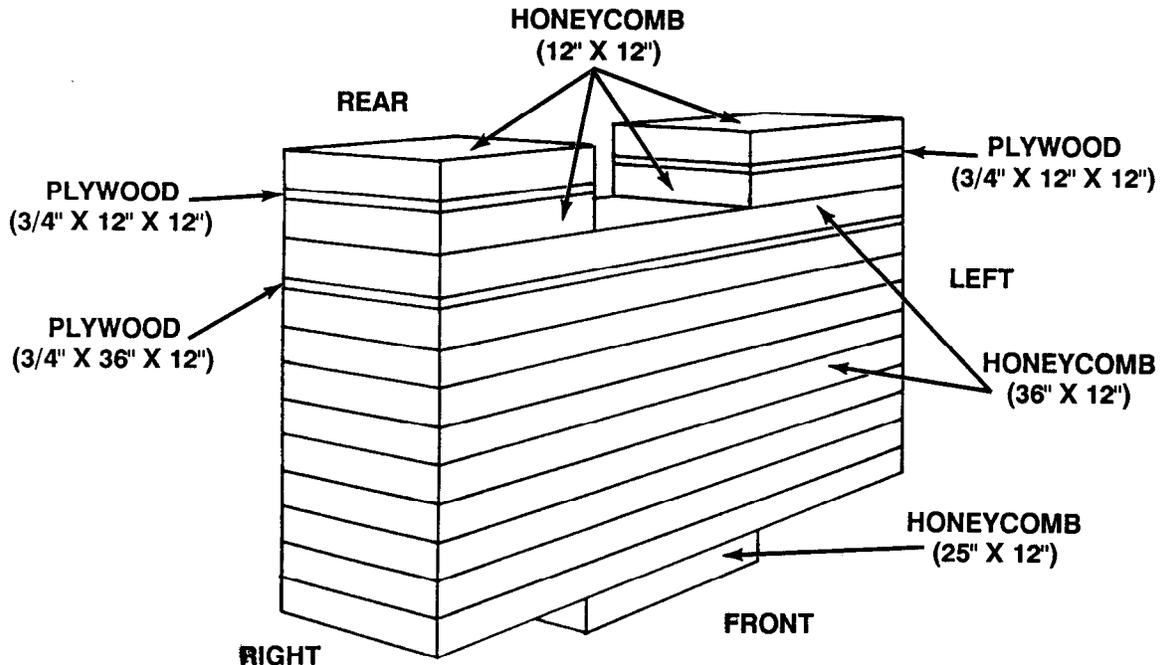
Note: This drawing is not drawn to scale.



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 over the base.
	2	45	18	3/4-inch plywood	Place plywood on top of the honeycomb.
	1	45	18	Honeycomb	Place honeycomb on top of the plywood.
	4	9	18	Honeycomb	Place two pieces of honeycomb on top of the 45-by 18-inch honeycomb, flush with each side.

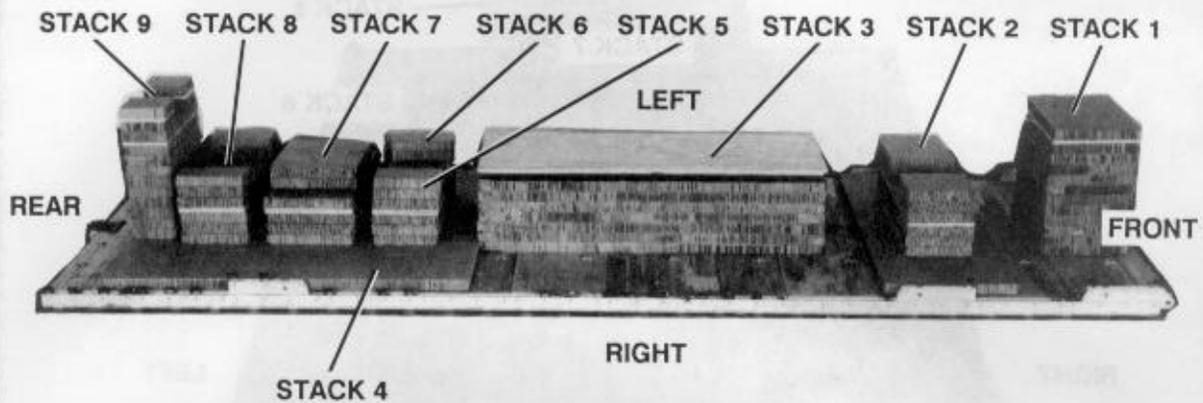
Figure 6-10. Honeycomb stack 8 prepared

Note: This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
9	1	25	12	Honeycomb	Place honeycomb as the base.
	9	36	12	Honeycomb	Center honeycomb over the base.
	1	36	12	3/4-inch plywood	Place plywood on top of the honeycomb.
	1	36	12	Honeycomb	Place honeycomb on top of the plywood.
	2	12	12	Honeycomb	Place one piece of honeycomb on top of the 36-by 12-inch honeycomb, flush with each side.
	2	12	12	3/4-inch plywood	Place plywood on top of the honeycomb, flush with each side.
	2	12	12	Honeycomb	Place honeycomb on top of the plywood, flush with each side.

Figure 6-11. Honeycomb stack 9 prepared



Stack Number	Position of Stack on Platform
1	Place stack: Centered flush with front edge of platform.
2	Centered 12 inches from stack 1.
3	Centered 12 inches from stack 2.
4	Flush with rear of stack 3, 3 inches from right rail.
5	Flush with rear of stack 3, 3 inches from left rail.
6	Between stacks 4 and 5, 10 inches from rear of stack 3.
7	Between stacks 4 and 5, 5 inches from rear of stack 6.
8	Between stacks 4 and 5, 5 inches from rear of stack 7.
9	Between stacks 4 and 5, 2 inches from rear of stack 8.

Figure 6-12. Honeycomb stacks positioned on platform

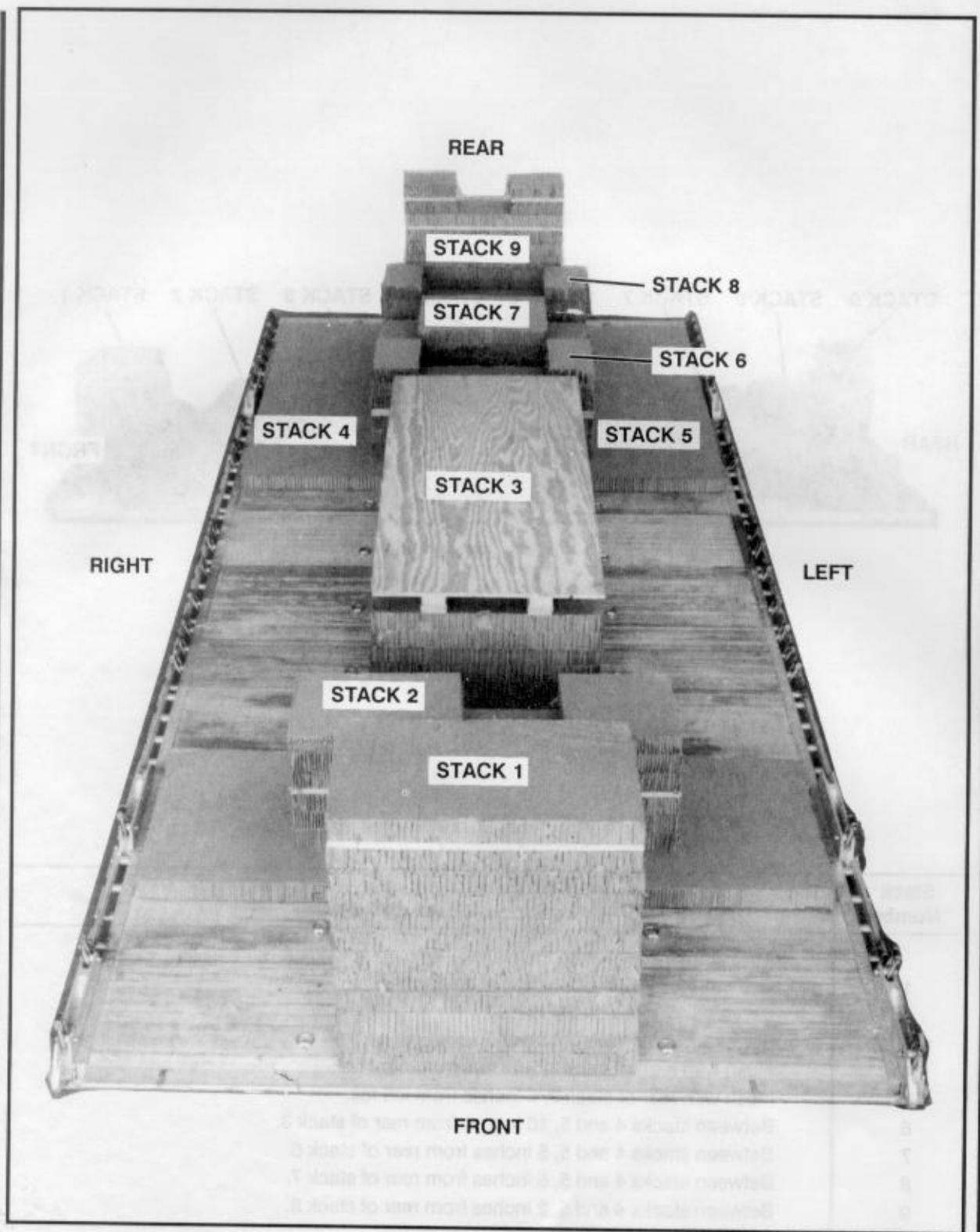


Figure 6-13. Front view of honeycomb stacks positioned on platform

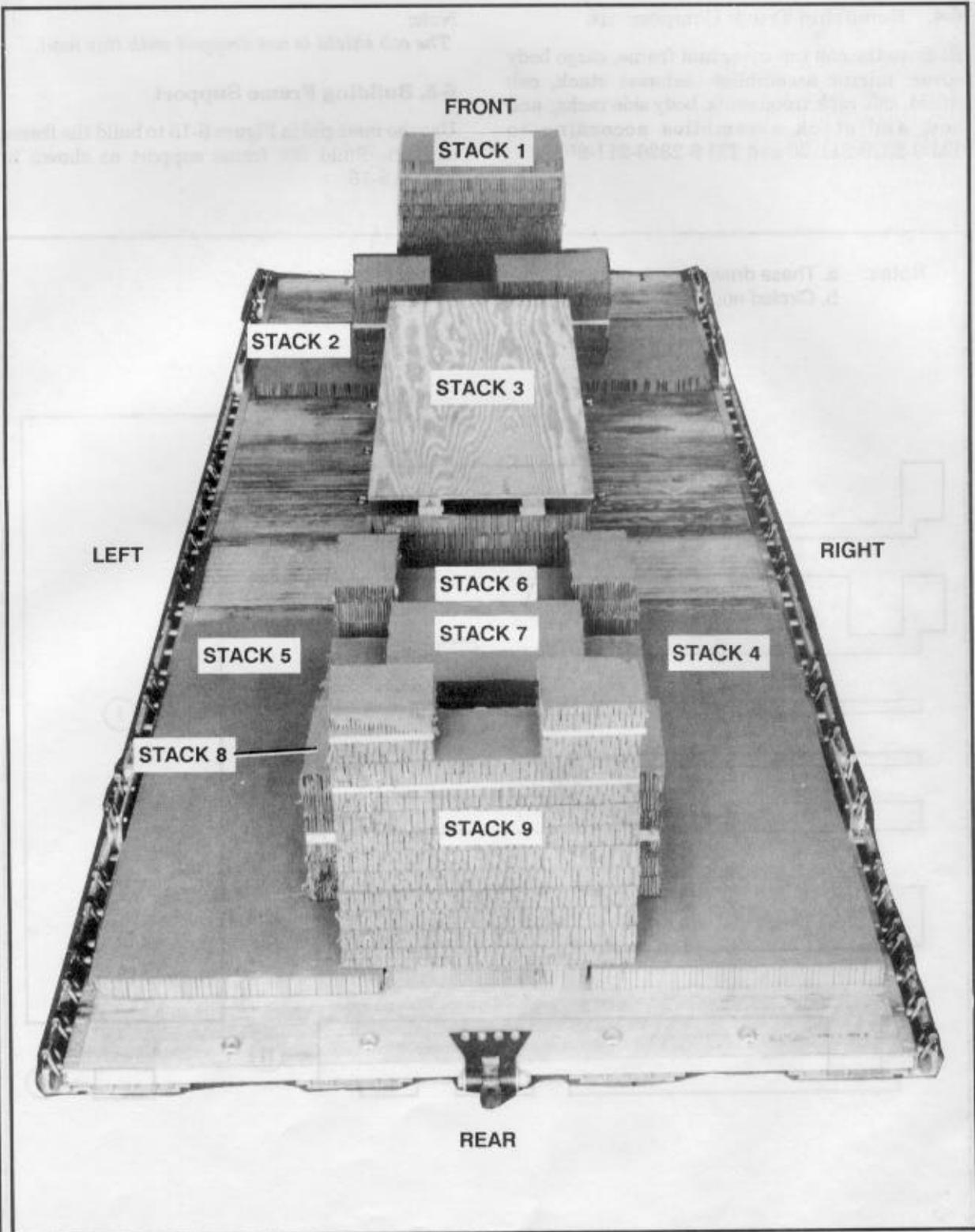


Figure 6-14. Rear view of honeycomb stacks positioned on platform.

6-4. Removing Truck Components

Remove the cab top cover and frame, cargo body cover, mirror assemblies, exhaust stack, cab shield, side rack troop seats, body side racks, and bow and stack assemblies according to TM 9-2320-211-20 and TM 9-2320-211-20P.

Note:

The cab shield is not dropped with this load.

6-5. Building Frame Support

Use the material in Figure 6-15 to build the frame support. Build the frame support as shown in Figure 6-16.

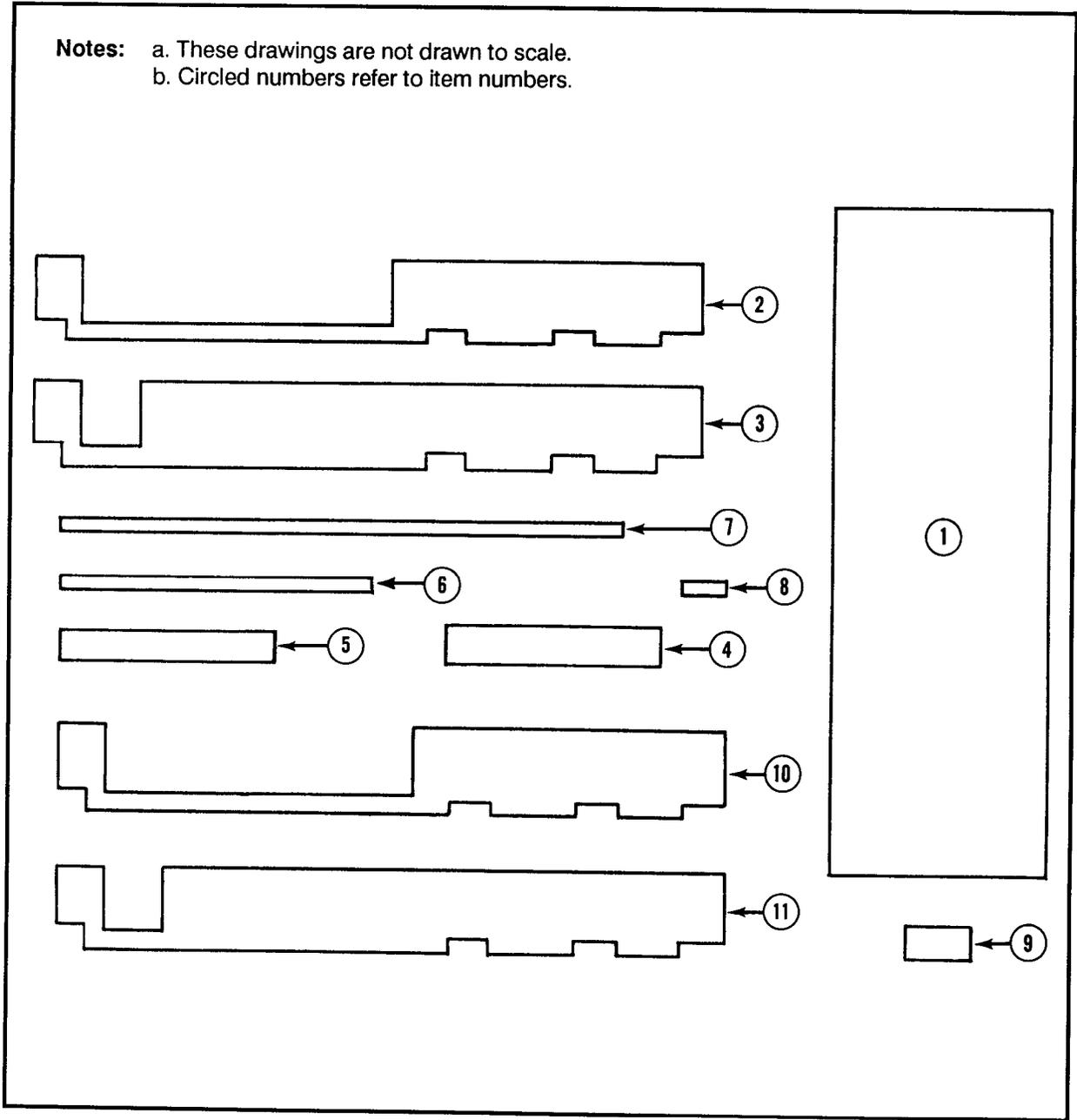


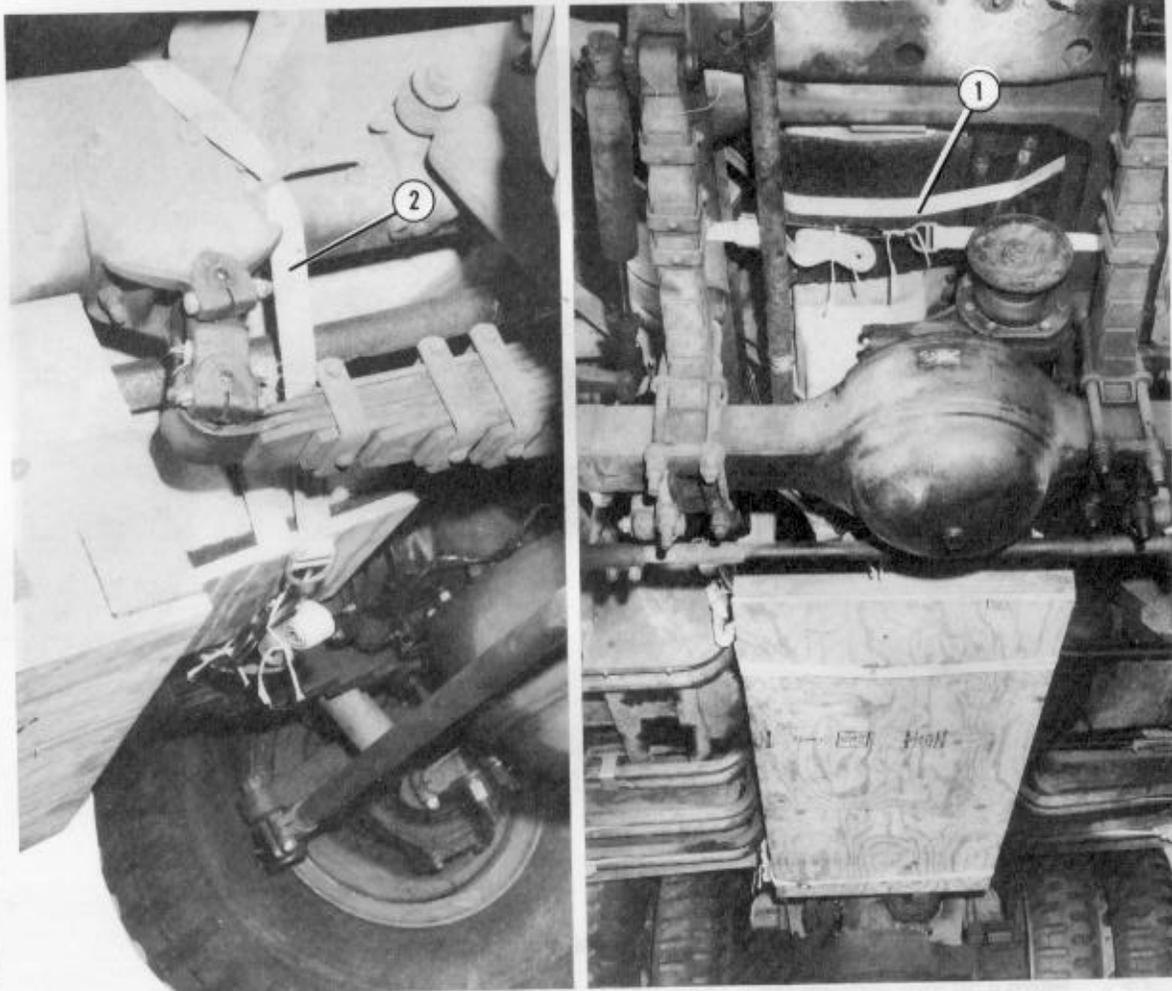
Figure 6-15. Material required for frame support

Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	33 1/4	95	3/4-inch plywood
2	1	13	95	3/4-inch plywood
3	1	13	95	3/4-inch plywood
4	1	3 1/2 (actual)	33 1/4	4- by 4-inch lumber
5	3	6	33 1/4	2- by 6-inch lumber
6	1	2	45	2- by 2-inch lumber
7	1	2	81 1/4	2- by 2-inch lumber
8	2	2	6	2- by 6-inch lumber
9	2	4	9 3/4	2- by 4-inch lumber
10	1	12	95	2- by 12-inch lumber
11	1	12	95	2- by 12-inch lumber

Figure 6-15. Material required for frame support (continued)

6-6. Installing Engine Supports and Frame Support

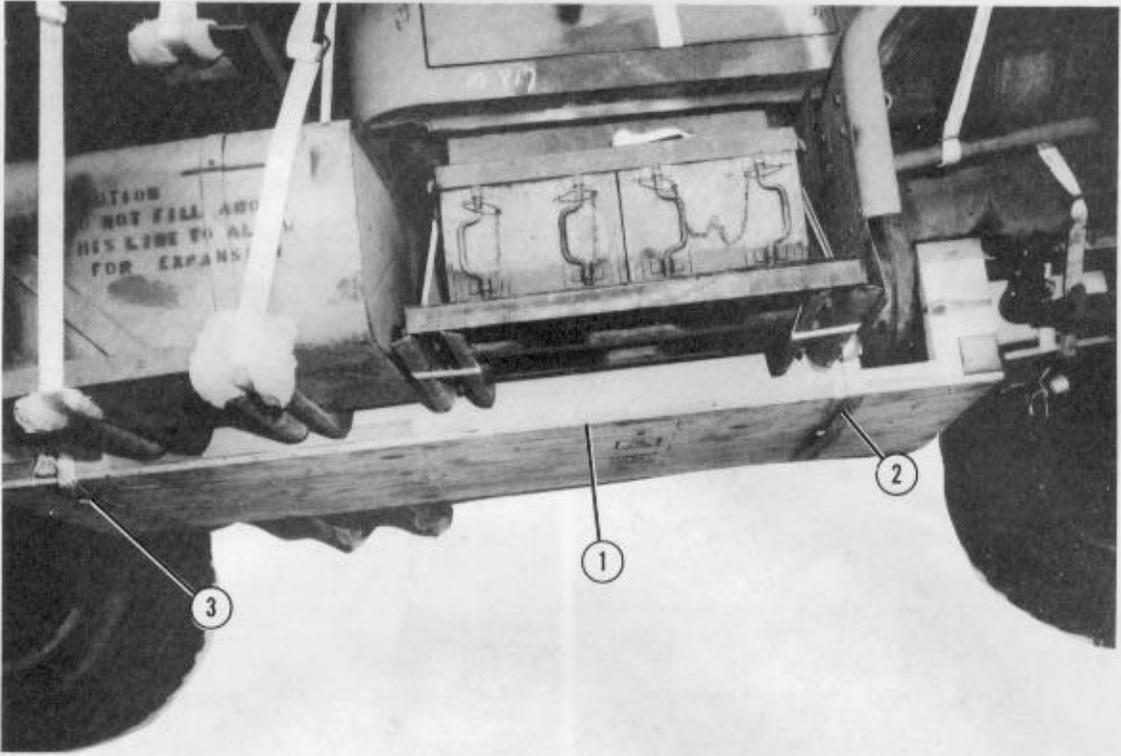
Install the engine supports and the frame support as shown in Figures 6-17 and 6-18 using four 15-foot tiedown straps.



- 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 Install 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 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 6-17. 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 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.
- ③ Install a second 30-foot tiedown strap near the rear of the frame support, adapting the procedures in-step 2 above.

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

Figure 6-18. Frame support installed

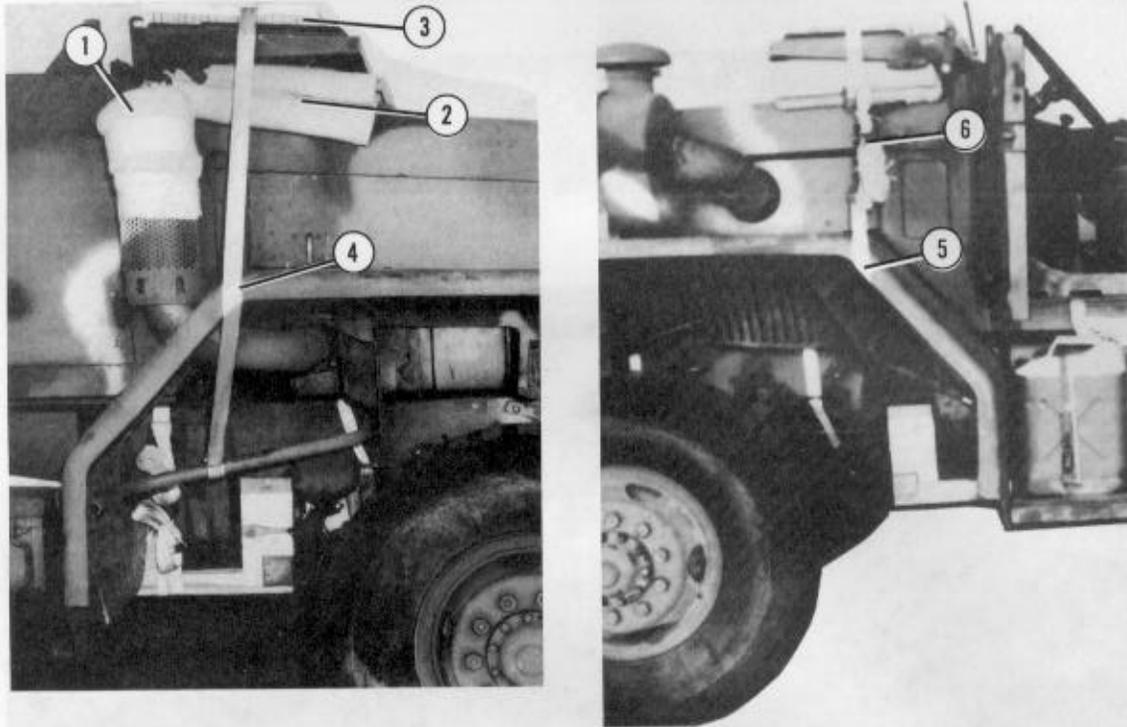
6-7. Preparing Truck

Prepare the truck as shown in Figure 6-19 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 secured. Pad the fire extinguisher, and secure it to the vehicle.

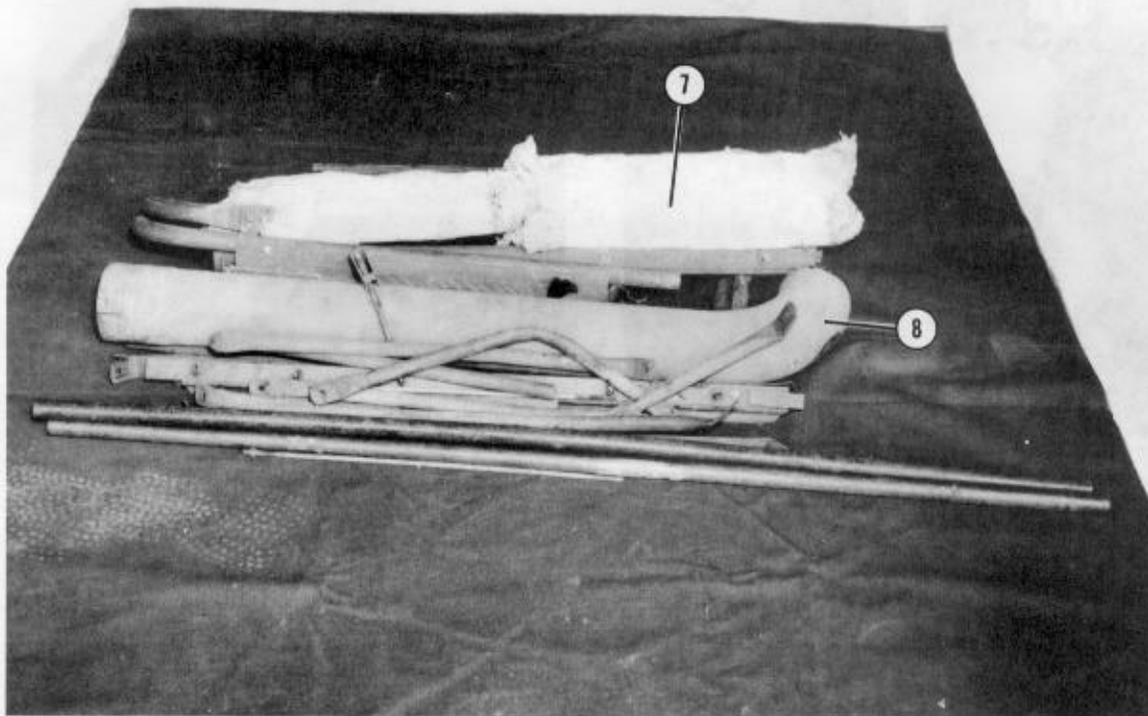
c. Fill the toolbox and the tool storage box with scrap honeycomb or cellulose wadding.



- ① Cover the exhaust pipe opening with cellulose wadding. Tape the wadding in place.
- ② 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.
- ③ Fold the windshield down on the plywood, and place a 24- by 60-inch piece of honeycomb on top of the windshield.
- ④ Pass the free end of a 15-foot tiedown strap around the right front fender brace and through its own D-ring. Pull the free end tight, and lay the strap across the honeycomb.
- ⑤ Pass the free end of a 15-foot tiedown strap around the left front fender brace and through its own D-ring. Pull the free end of the strap tight.
- ⑥ Secure the ends of the straps according to FM 10-500-2/TO 13C7-1-5.

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

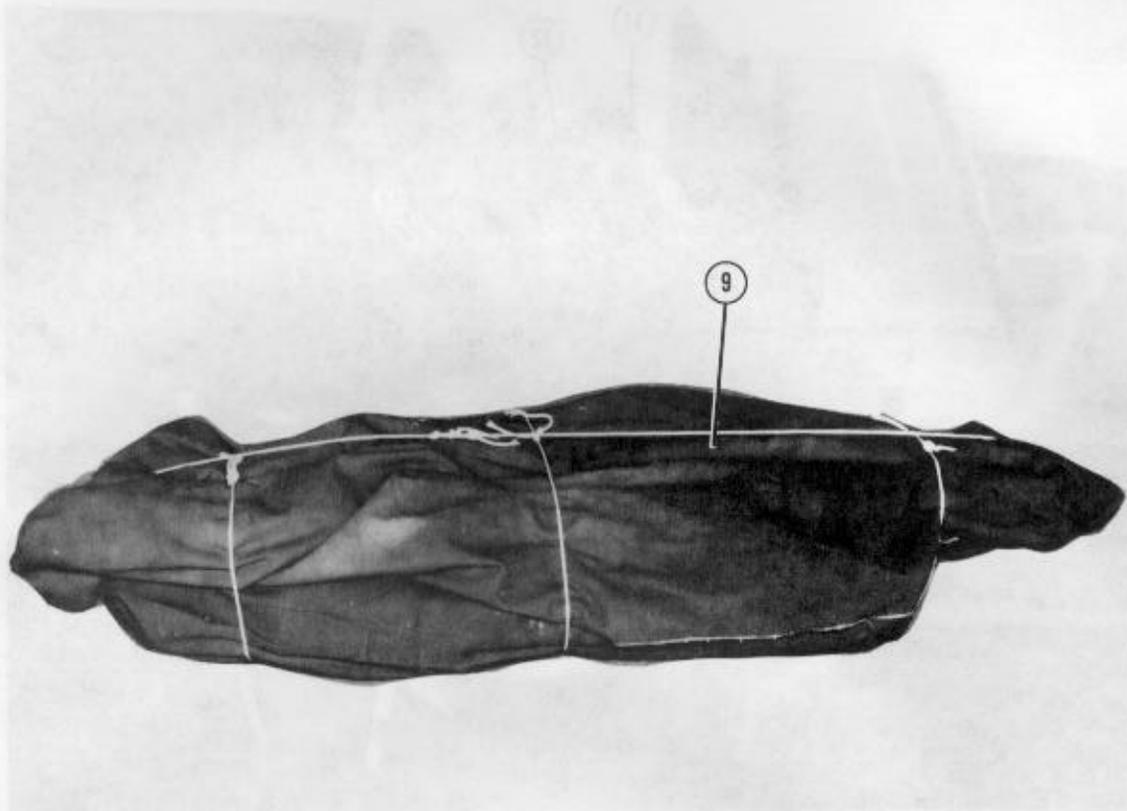
Figure 6-19. Truck prepared



- ⑦ Wrap the mirror assemblies in cellulose wadding. Tape the wadding in place. Place the mirror assemblies on the cab top cover.
- ⑧ 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.

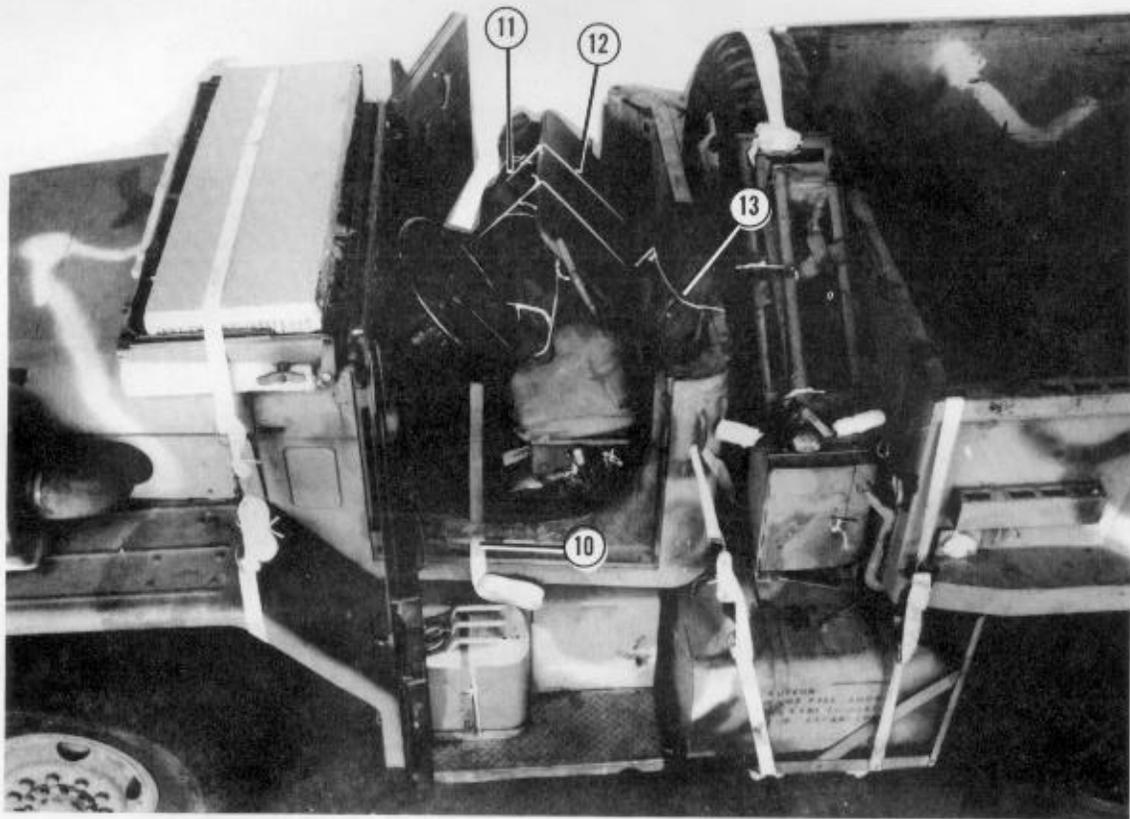
Note: Other small components may also be placed on the cab top cover.

Figure 6-19. Truck prepared (continued).



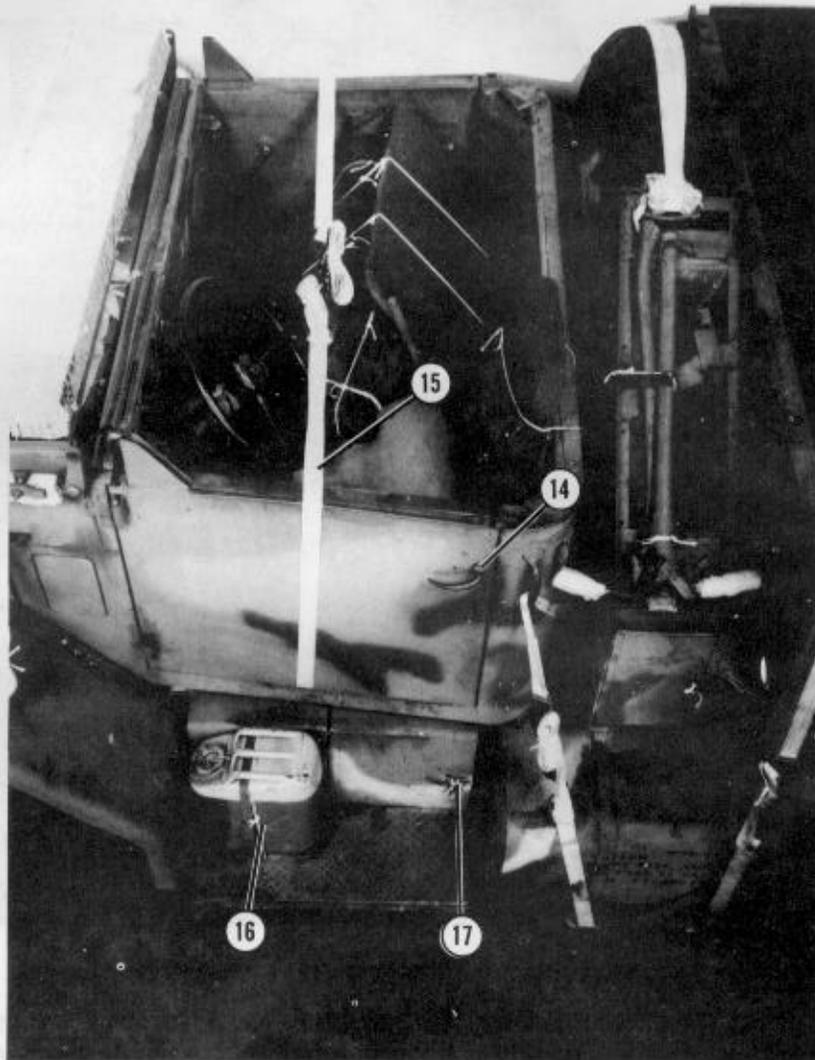
- ⑨ Wrap the cab top cover over the items placed on it. Tie the cover in place with type III nylon cord.

Figure 6-19. Truck prepared (continued)



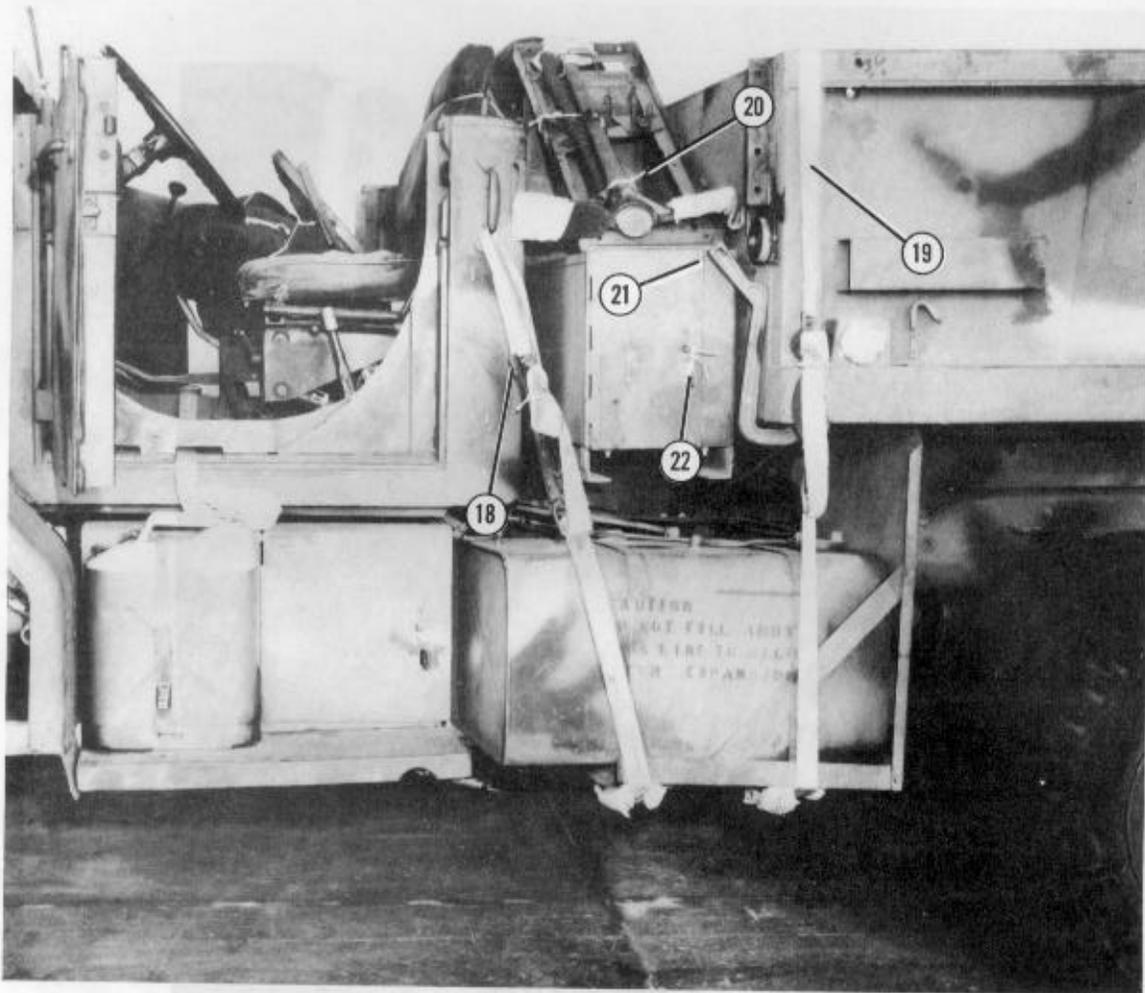
- ⑩ Form a 30-foot tiedown strap according to FM 10-500-2/TO 13C7-1-5. Lay the strap across the cab floor, and pass the ends of the strap through the slots in the door frame.
- ⑪ Place the items wrapped in the cab top cover on the cab seats.
- ⑫ Fold the back of the passenger seat down against the cab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

Figure 6-19. Truck prepared (continued)



- ①④ Close the truck doors.
- ①⑤ Pass the ends of the 30-foot tiedown strap over the cab doors. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ①⑥ Place the fuel or water can in its storage bracket, and fasten the retainer strap. Tie the can in place with type III nylon cord.
- ①⑦ Tie the tool storage box closed with type III nylon cord.

Figure 6-19. Truck prepared (continued)

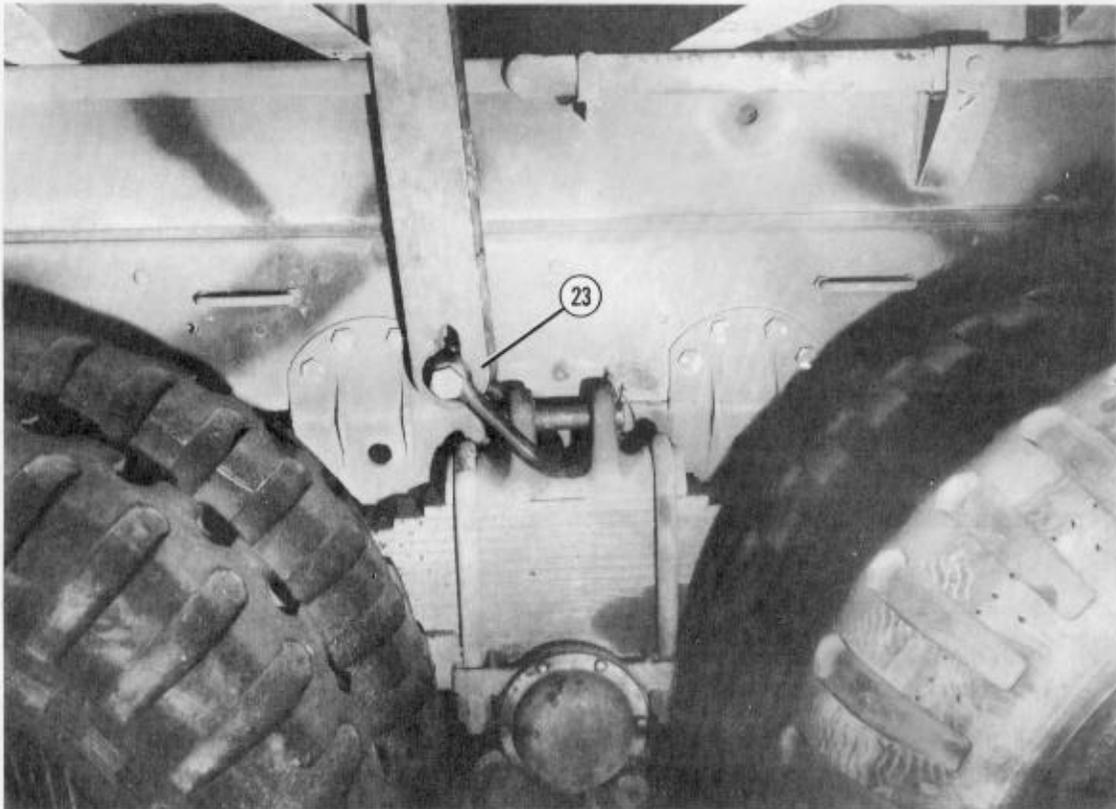


- ⑱ Pass the free end of a 15-foot tiedown strap through the handhold handle, through the front fuel tank hanger using the first side rack socket, and under the fuel tank. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑲ Install another 15-foot strap as explained in step 18 above using the second side rack socket and the rear fuel tank hanger.
- ⑳ Place the pioneer tools in their bracket, and tie the tools in place with type III nylon cord.
- ㉑ Tie the tailgate control rod hand lever in place with a double length of type III nylon cord.

Note: Pad all sharp edges that the straps may touch with cellulose wadding.

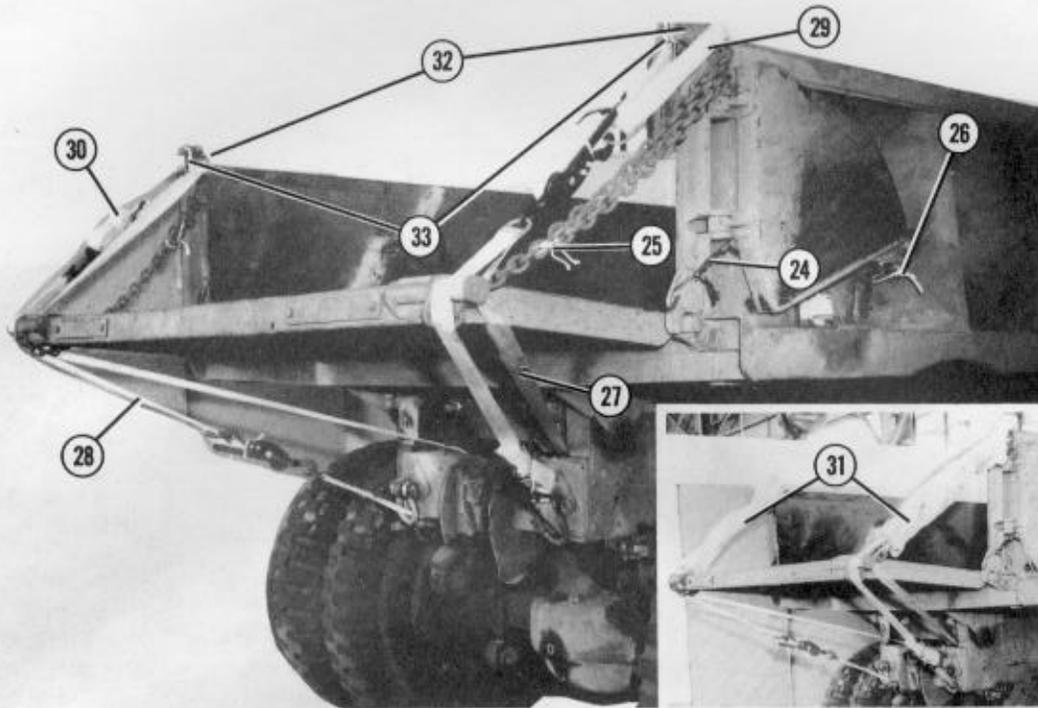
- ㉒ Tie the toolbox closed with type III nylon cord.

Figure 6-19. Truck prepared (continued)



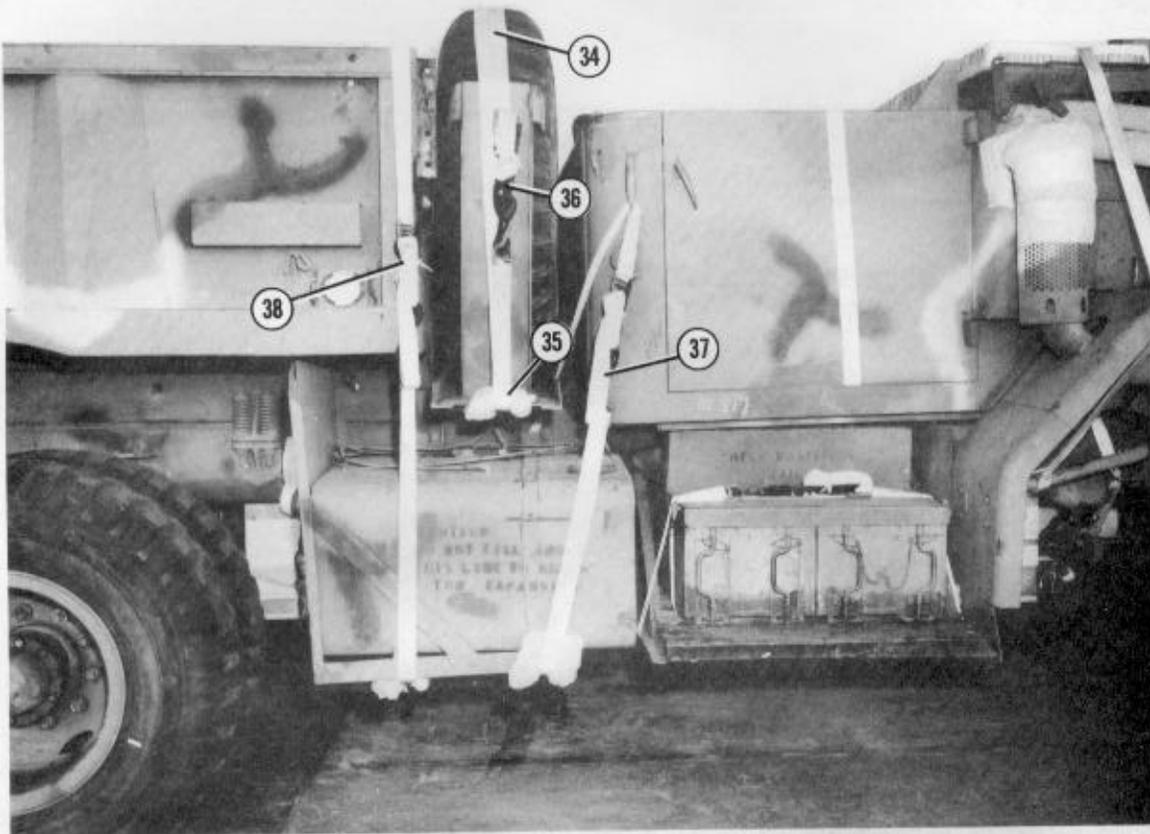
- 23 Lower a suspension extension bracket down through one access hole in the body of the truck. Bolt the bracket to the spring saddle with a large suspension clevis. Bolt a second bracket to the spring saddle on the opposite side of the truck in the same way.

Figure 6-19. Truck prepared (continued)



- ②4 Tie the lower tailgate hinges closed with 1/2-inch tubular nylon webbing.
- ②5 Lower the tailgate, and hook the chains. Tie the chains to the body, and tie the chains together with type III nylon cord.
- ②6 Push the tailgate wings against the body, and secure the wings with their hooks. Tie the wings in place with type III nylon cord.
- ②7 Run a 15-foot tiedown strap around the upper hinge pin, around the rear mainframe cross member, and through the lifting shackle. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ②8 Run a 15-foot tiedown strap as explained in step 27 above on the other side of the truck.
- ②9 Run a 15-foot tiedown strap around the upper hinge bracket and the upper tailgate hinge pin. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③0 Run a 15-foot tiedown strap as explained in step 29 above on the other side of the truck.
- ③1 Wrap the upper tiedown straps and the tailgate chains with cellulose wadding. Tape the wadding in place.
- ③2 Bolt a large suspension clevis to each upper tailgate hinge bracket.
- ③3 Tie each upper hinge bracket retaining pin in its bracket with type III nylon cord.

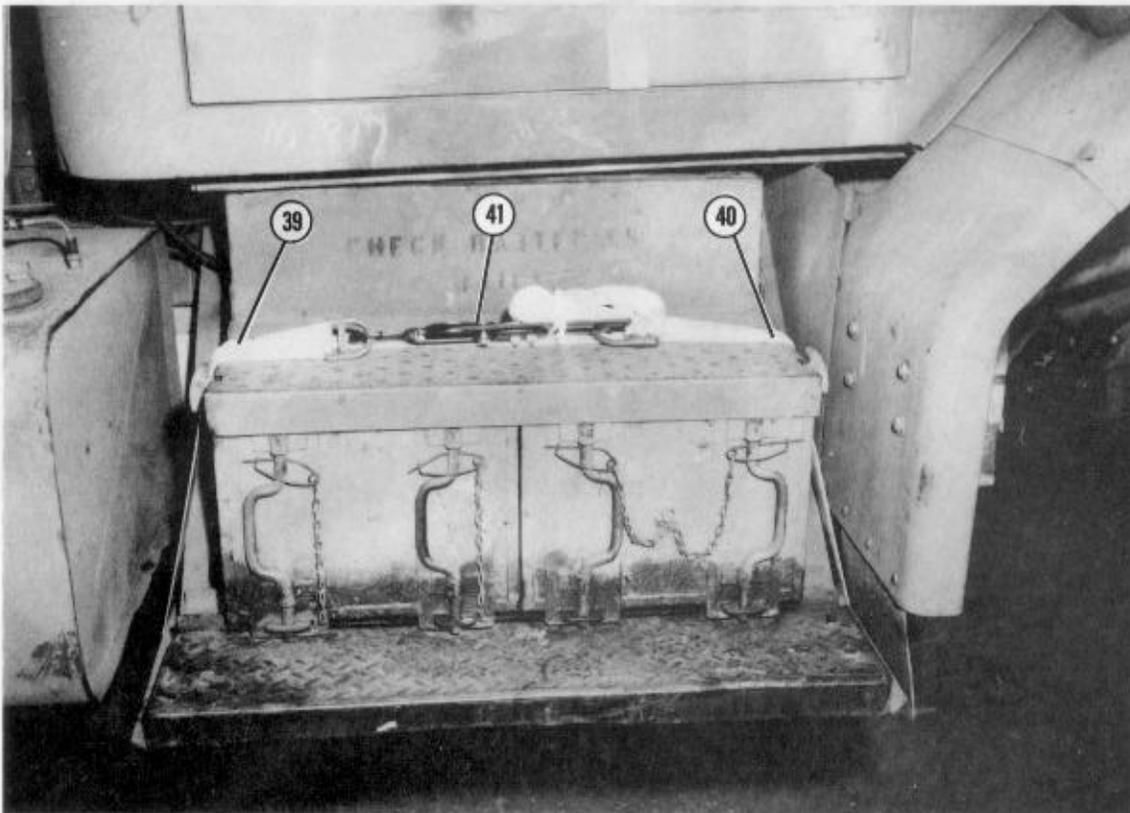
Figure 6-19. Truck prepared (continued)



- ③④ Pass the free end of a 15-foot tiedown strap around the top of the spare tire support bracket. Lay the strap over the tire.
- ③⑤ Pass the free end of the strap around the spare tire support clamp assembly.
- ③⑥ Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③⑦ Pass the free end of a 15-foot tiedown strap through the handhold handle, through the front fuel tank hanger, and under the fuel tank. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③⑧ Install a 15-foot tiedown strap as explained in step 37 above using the first side rack socket and the rear fuel tank hanger.

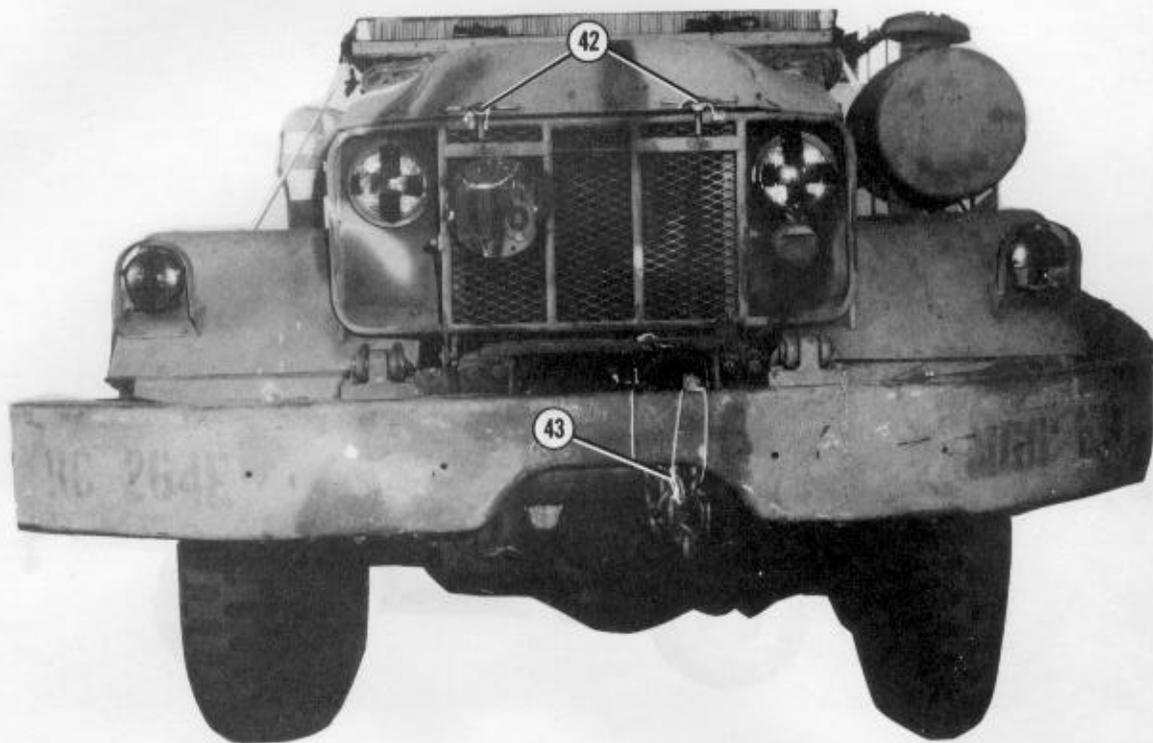
Note: Pad all sharp edges that the straps may touch with cellulose wadding.

Figure 6-19. Truck prepared (continued)



- 39 Pass one end of a 15-foot tiedown strap around the rear running board support and back to the top of the battery box.
- 40 Pass the other end of the strap around the front running board support and back to the top of the box.
- 41 Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 6-19. Truck prepared (continued)



- ④2 Tie the hood closed with type III nylon cord.
- ④3 If the truck is equipped with a winch, tie the hook to the bumper with type III nylon cord.

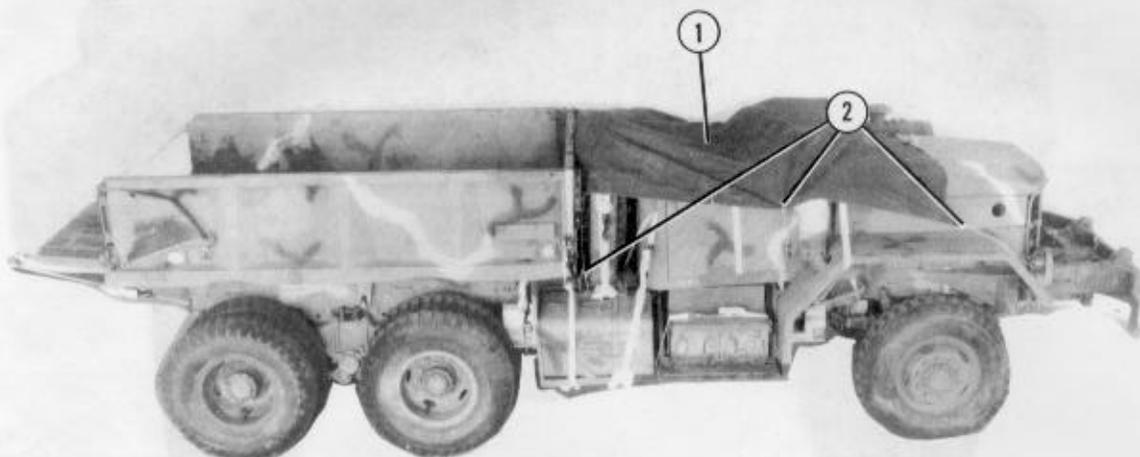
Figure 6-19. Truck prepared (continued)

6-8. Installing Load Cover

Install the load cover as described below.

- a. Place the transmission gearshift lever in the neutral position.
- b. Make sure that the hand brake control lever is in the release position.

- c. Tie an 8- by 12-foot piece of duck cloth (load cover) over the front of the truck as shown in Figure 6-20.



- ① Cover the cab and hood of the truck with an 8- by 12-foot piece of cotton duck cloth.
- ② Tie the cover in place with type III nylon cord.

Figure 6-20. Load cover installed

6-9. Positioning Truck

Position the truck as described below.

a. Install two 12-foot (4-loop), type XXVI nylon webbing slings on the rear suspension brackets. Install two 16-foot (4-loop), type XXVI

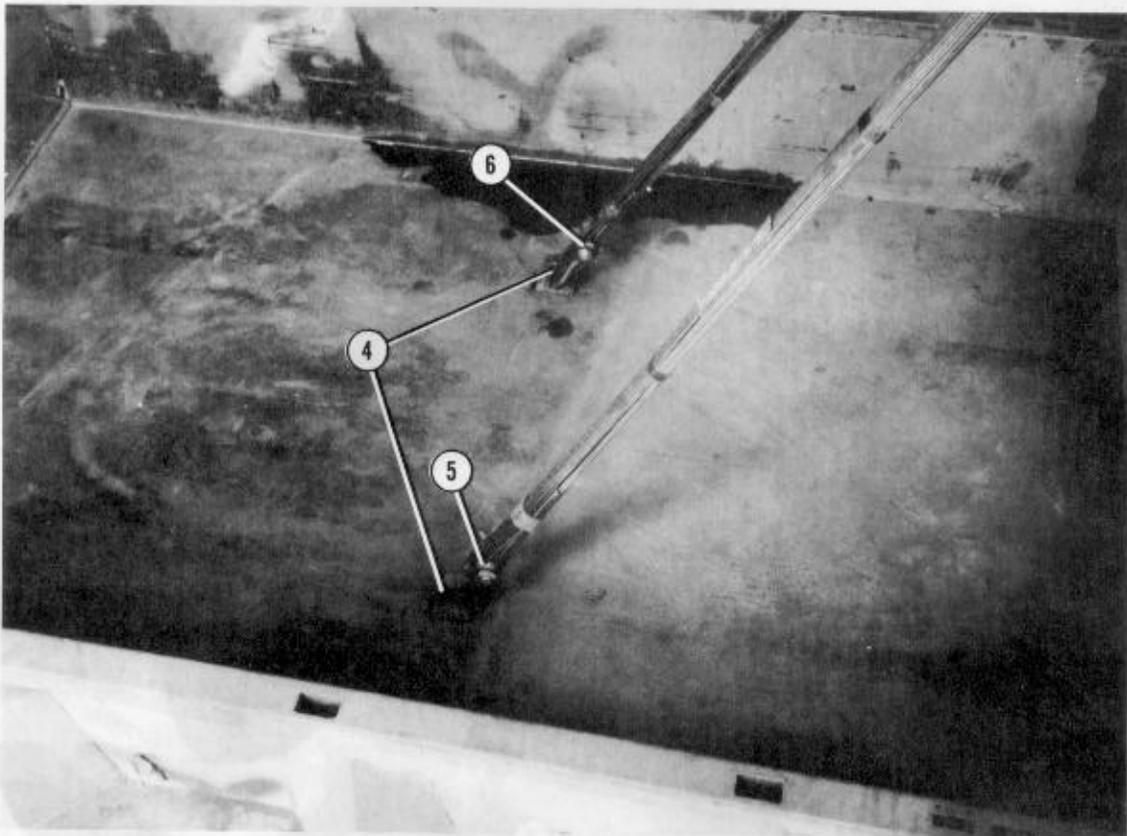
nylon webbing slings on the front suspension clevises. Install the lifting slings as shown in Figure 6-21.

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



- ① Fit a large suspension clevis on each front lifting shackle.
- ② Attach the end of a 16-foot (4-loop), type XXVI nylon webbing sling to a front lifting shackle with a large clevis.
- ③ Bolt a second sling to the other front lifting shackle as described in step 2 above.

Figure 6-21. Lifting slings installed

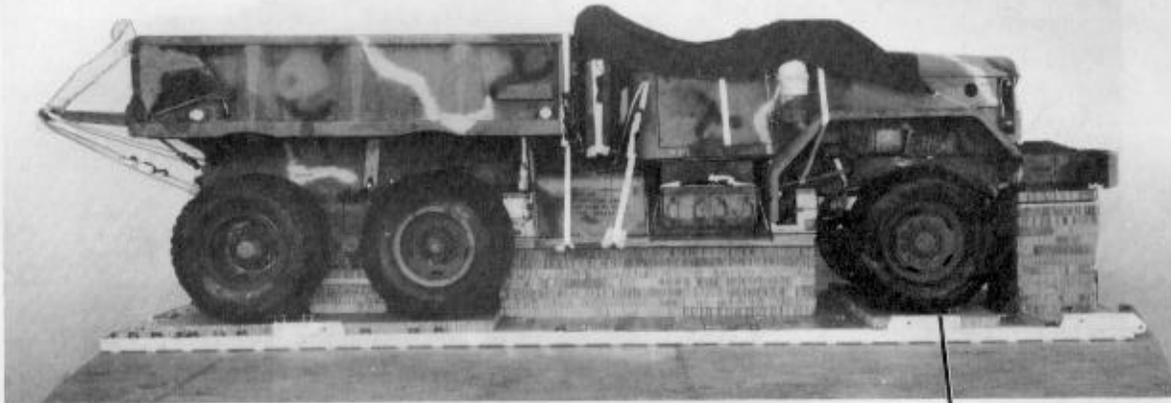


- ④ Fit a large suspension clevis on each suspension extension bracket in the rear of the truck.
- ⑤ Attach the end of a 12-foot (4-loop), type XXVI nylon webbing sling to one of the large suspension clevises.
- ⑥ Attach a second 12-foot sling to the suspension clevis on the opposite side of the truck.

Figure 6-21. Lifting slings installed (continued)

b. Position the truck on the honeycomb stacks as shown in Figure 6-22.

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



- ① Lift the truck with the lifting slings, and position it on the honeycomb stacks with the front axle centered on stack 2 and the mainframe support centered on stack 3.

Note: The front and rear overhang may vary with the series of truck. The truck shown above has no overhang in the front and a 27-inch overhang in the rear.

Figure 6-22. Truck positioned

6-10. Installing Lashings

Lash the truck to the platform using thirty-eight 15-foot tiedown straps, 38 D-rings, and 38 load binders as shown in Figures 6-23 through 6-27.

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.



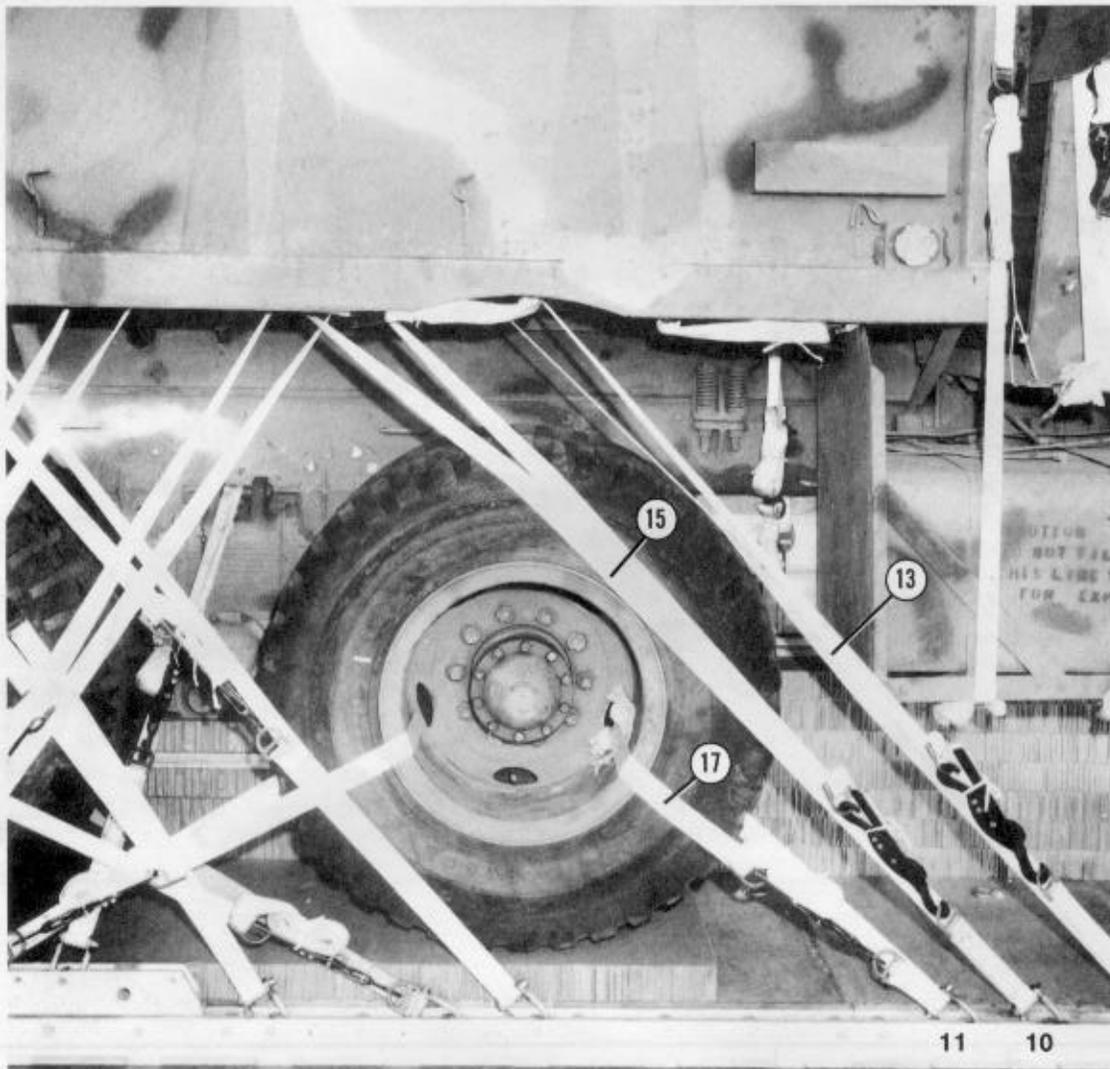
Lashing Number	Tiedown Clevis Number	Instructions
1	1	Pass lashing: Around the front bumper, inside the lifting shackle, right side.
2	1A	Around the front bumper, inside the lifting shackle, left side.
3	2	Through the front wheel, right side.
4	2A	Through the front wheel, left side.
5	4	Around the front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

Figure 6-23. Lashings 1 through 6 installed



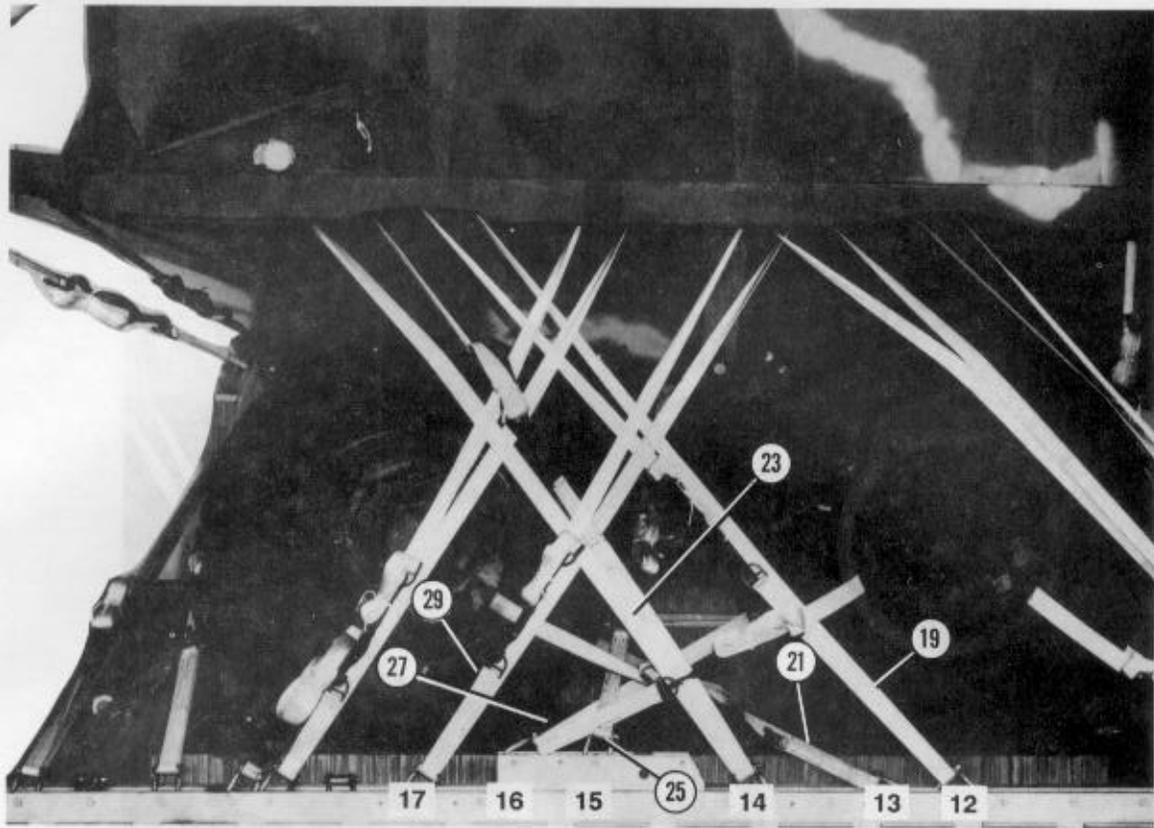
Lashing Number	Tiedown Clevis Number	Instructions
7	6	Pass lashing: Through the front wheel, right side.
8	6A	Through the front wheel, left side.
9	7	Around the mainframe, in front of the spring bracket, right side.
10	7A	Around the mainframe, in front of the spring bracket, left side.
11	8	Around the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

Figure 6-24. Lashings 7 through 12 installed



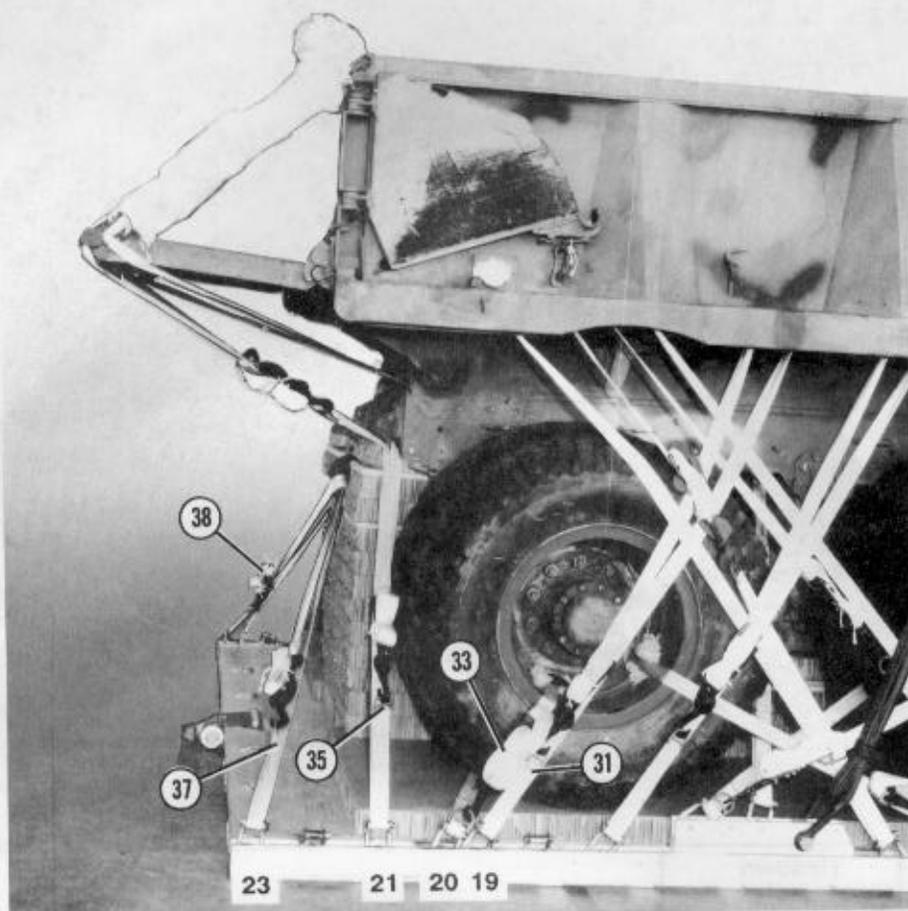
Lashing Number	Tiedown Clevis Number	Instructions
13	9	Pass lashing: Around the third body support, right side.
14	9A	Around the third body support, left side.
15	10	Around the fourth body support, right side.
16	10A	Around the fourth body support, left side.
17	11	Around the front outside dual wheel, right side.
18	11A	Around the front outside dual wheel, left side.

Figure 6-25. Lashings 13 through 18 installed



Lashing Number	Tiedown Clevis Number	Instructions
19	12	Pass lashing: Around the sixth body support, right side.
20	12A	Around the sixth body support, left side.
21	13	Around the rear outside dual wheel, right side.
22	13A	Around the rear outside dual wheel, left side.
23	14	Around the seventh body support, right side.
24	14A	Around the seventh body support, left side.
25	15	Around the spring saddle, right side.
26	15A	Around the spring saddle, left side.
27	16	Around the front outside dual wheel, right side.
28	16A	Around the front outside dual wheel, left side.
29	17	Around the fourth body support, right side.
30	17A	Around the fourth body support, left side.

Figure 6-26. Lashings 19 through 30 installed



Lashing Number	Tiedown Clevis Number	Instructions
31	19	Pass lashing:
32	19A	Around the fifth body support, right side.
33	20	Around the fifth body support, left side.
34	20A	Around the rear outside dual wheel, right side.
35	21	Around the rear outside dual wheel, left side.
36	21A	Through the rear towing shackle, right side.
37	23	Through the rear towing shackle, left side.
38	23A	Through the towing pintle.

Figure 6-27. Lashings 31 through 38 installed

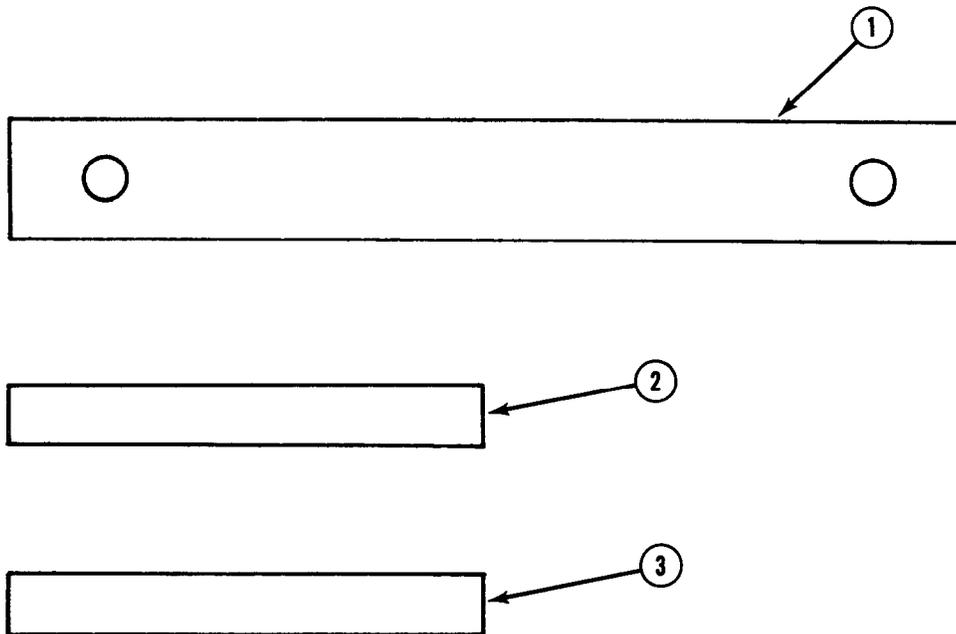
6-11. Building Suspension Sling Spreaders

Build two front and one rear suspension sling spreaders as described below.

b. Build a rear suspension sling spreader as shown in Figures 6-30 and 6-31.

a. Build two front suspension sling spreaders as shown in Figures 6-28 and 6-29. One will be used for the right; one, for the left.

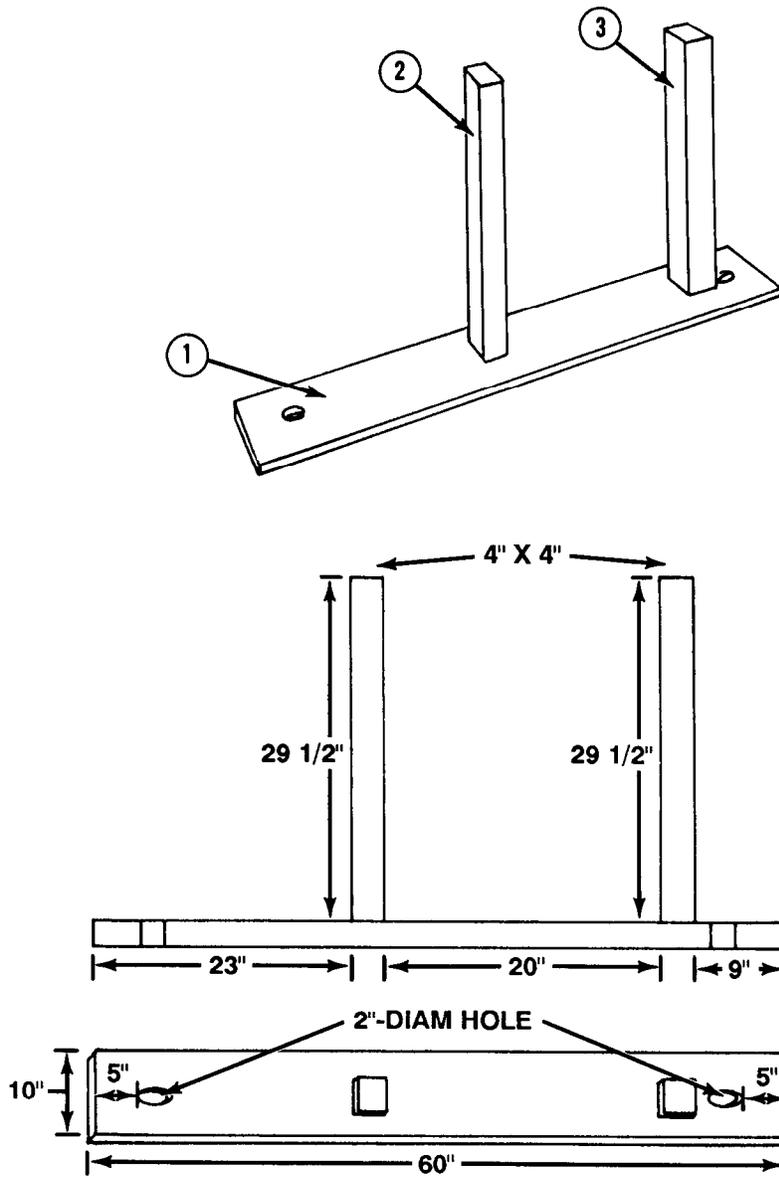
Notes: a. These drawings are not drawn to scale.
 b. Circled numbers refer to item numbers.



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)	29 1/2	4- by 4-inch lumber
3	1	3 1/2 (actual)	29 1/2	4- by 4-inch lumber

Figure 6-28. Material required for each front suspension sling spreader

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

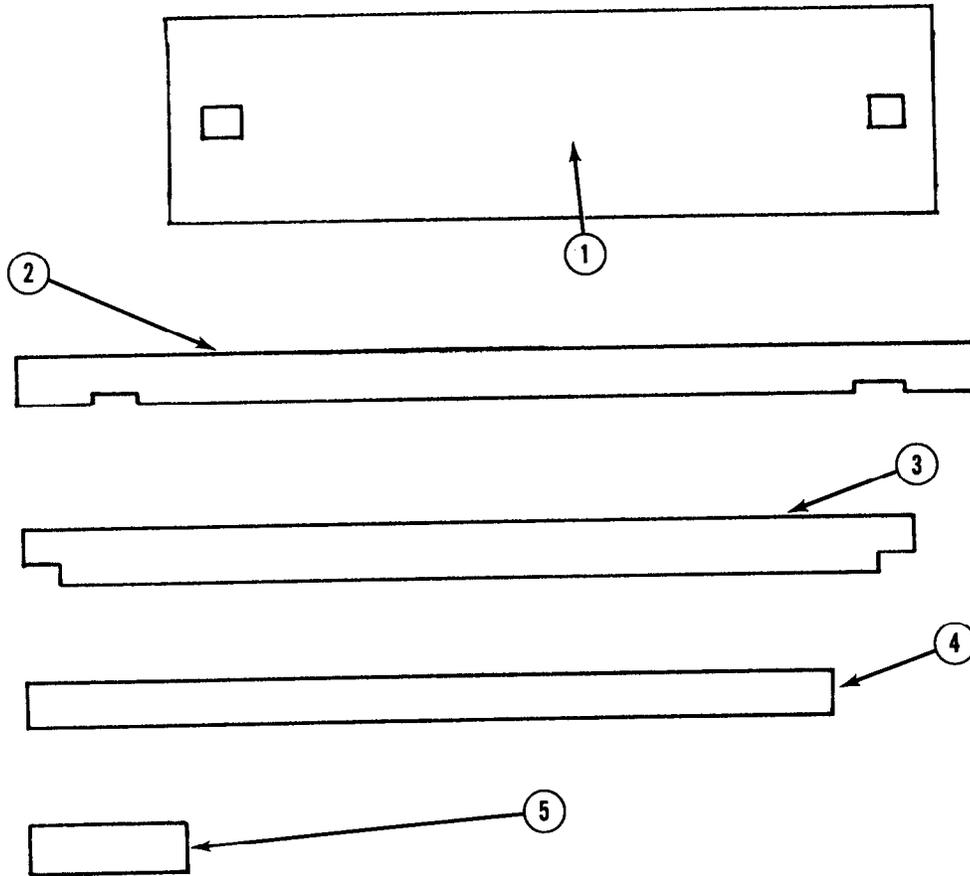


Step:

1. Construct two front suspension sling spreaders.
2. Secure the 4- by 4-inch lumber in place, as shown, with sixteen-penny nails.

Figure 6-29. Front suspension sling spreaders constructed

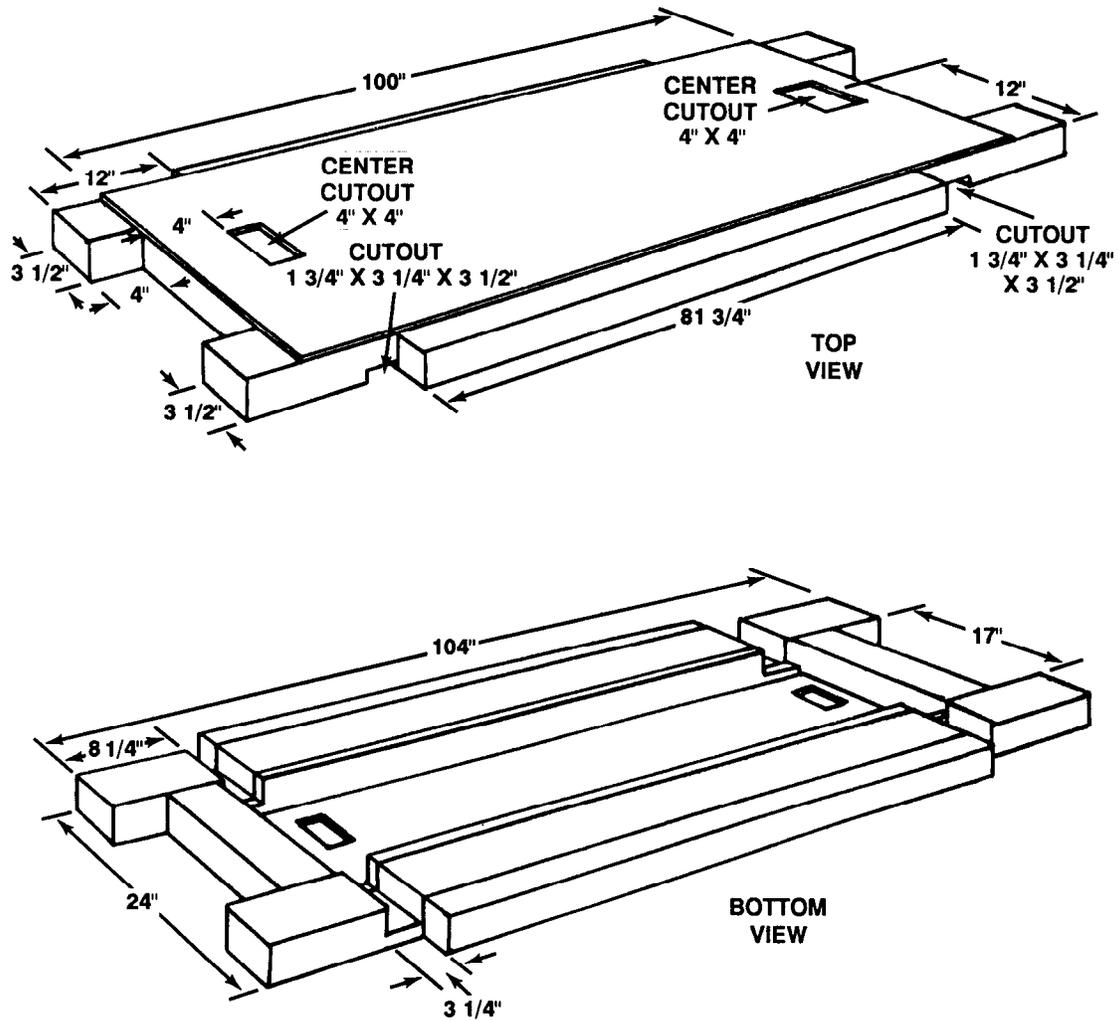
Notes: a. These drawings are not drawn to scale.
 b. Circled numbers refer to item numbers.



Item Number	Pieces	Width (Inches)	Length (Inches)	Material
1	1	24	94 1/2	3/4-inch plywood
2	2	3 1/2 (actual)	104	4- by 4-inch lumber
3	2	1 3/4 (actual)	87 1/2	2- by 4-inch lumber
4	2	1 3/4 (actual)	81 3/4	2- by 4-inch lumber
5	2	3 1/2 (actual)	17	4- by 4-inch lumber

Figure 6-30. Material required for rear suspension sling spreader

Note: These drawings are not drawn to scale.



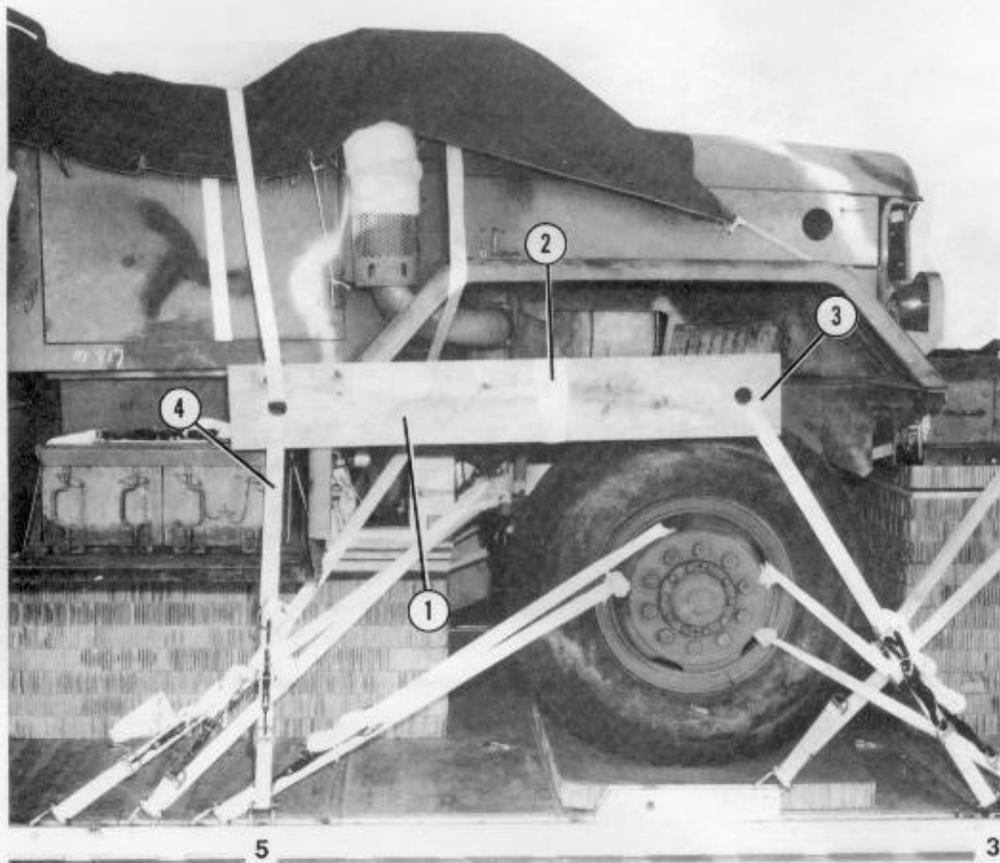
Step:

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

Figure 6-31. Rear suspension sling spreader constructed

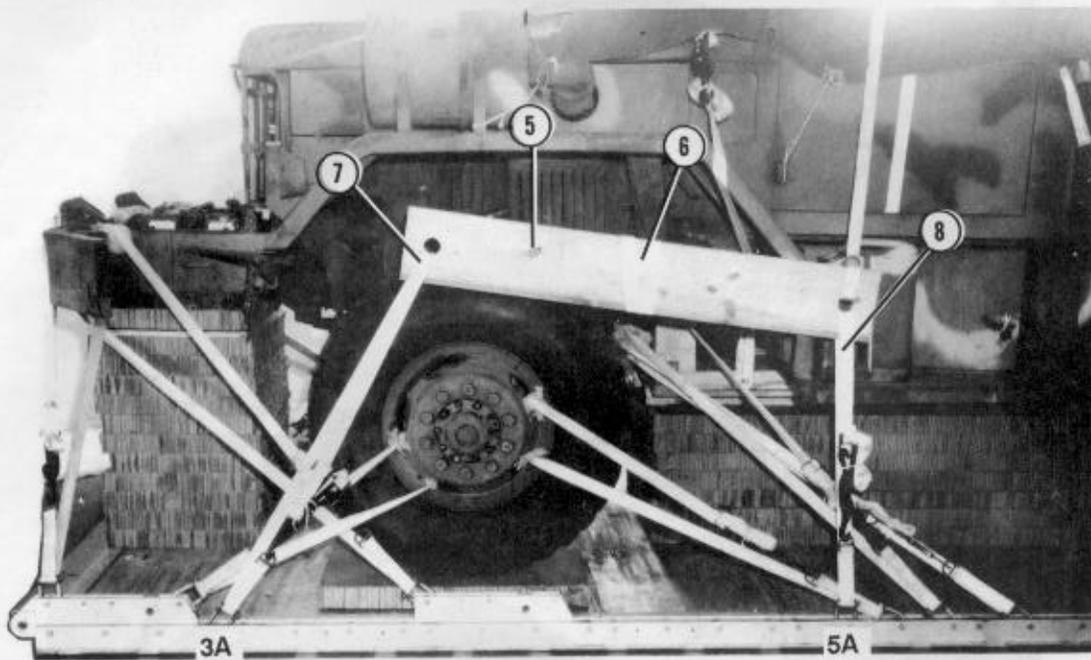
6-12. Installing Suspension Sling Spreaders

Install the suspension sling spreaders as shown in Figures 6-32 and 6-33.



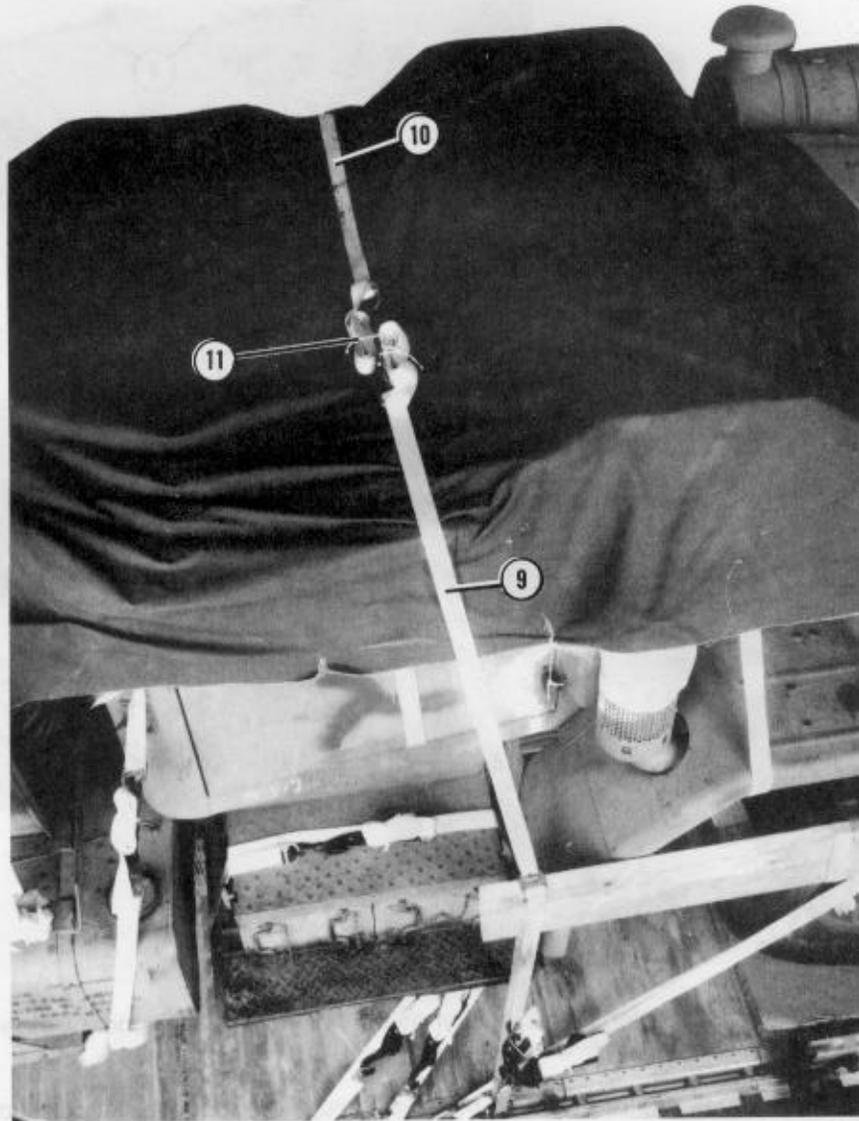
- ① Position the right front suspension sling spreader as shown.
- ② Pass the free end of a 15-foot tiedown strap through the third tiedown provision and around the center of the 2- by 10-inch portion of the sling spreader. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ③ Pass the free end of a 15-foot tiedown strap through the front hole in the sling spreader and clevis 3. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ④ Pass the free end of a 15-foot tiedown strap through the rear hole in the sling spreader and clevis 5. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 6-32. Front suspension sling spreaders installed



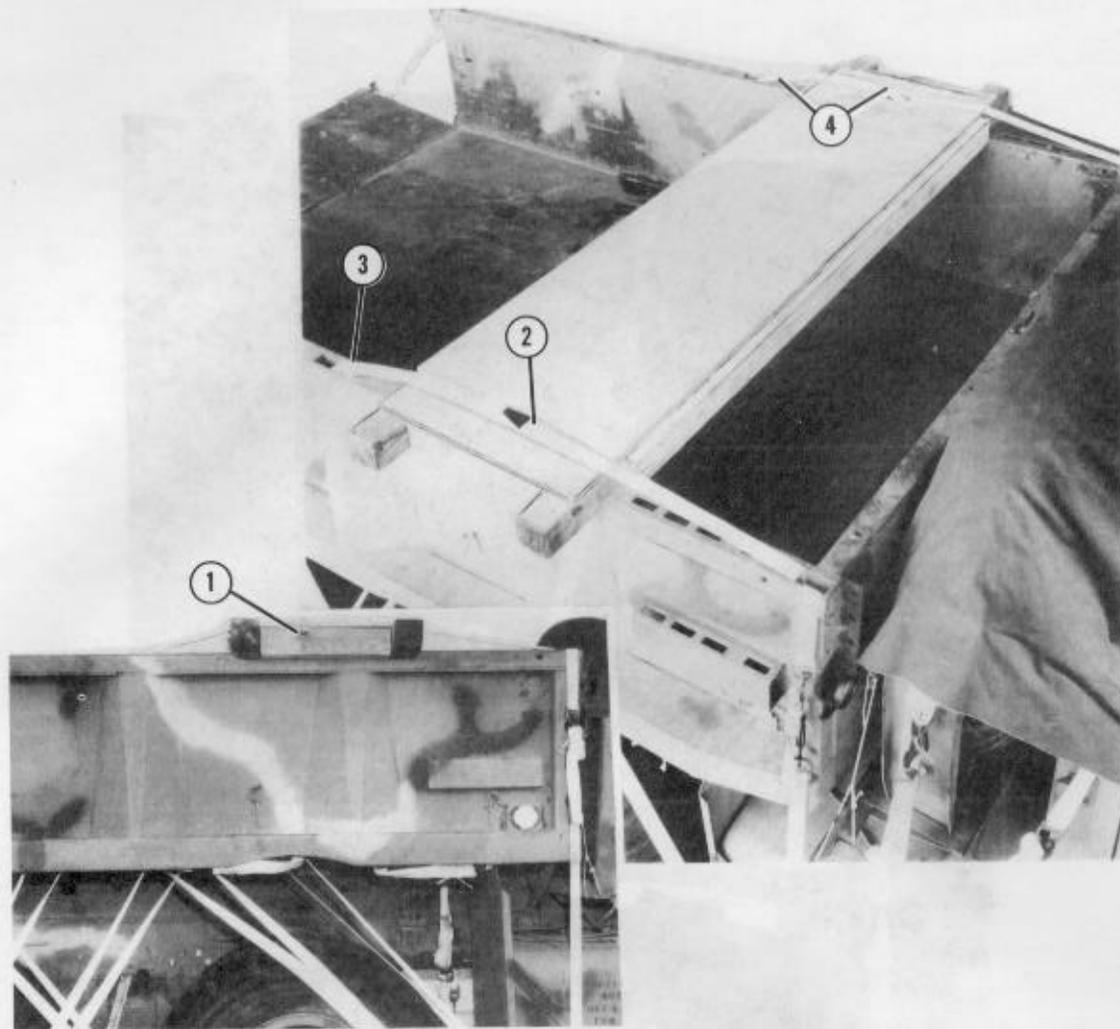
- ⑤ Position the left front suspension sling spreader as shown.
- ⑥ Pass the free end of a 15-foot tiedown strap through the third tiedown provision and around the center of the 2- by 10-inch portion of the sling spreader. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑦ Pass the free end of a 15-foot tiedown strap through the front hole in the sling spreader and clevis 3A. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ⑧ Pass the free end of a 15-foot tiedown strap through the rear hole in the sling spreader and clevis 5A. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.

Figure 6-32. Front suspension sling spreaders installed (continued)



- ⑨ Pass the free end of a 15-foot tiedown strap through the rear hole in the right suspension sling spreader and through its own D-ring. Pass the end of the strap to the top of the load.
- ⑩ Pass the free end of a 15-foot tiedown strap through the rear hole in the left suspension sling spreader and through its own D-ring. Pass the end of the strap to the top of the load.
- ⑪ Secure the ends of the straps according to FM 10-500-2/TO 13C7-1-5.

Figure 6-32. Front suspension sling spreaders installed (continued)

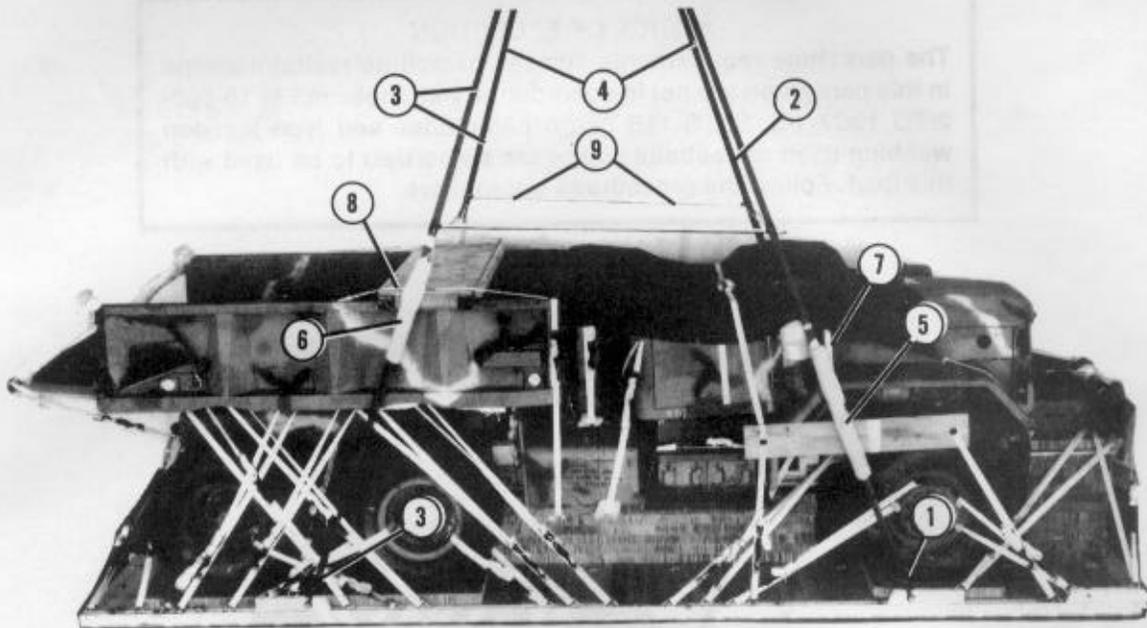


- ① Center the rear suspension sling spreader on the body of the truck and over the front dual wheels, 23 inches from the front of the truck body.
- ② Pass the free end of a 15-foot tiedown strap up through the second side rack socket on the right side of the truck, through the hole in the suspension sling spreader, and down through the first side rack socket. 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 up through the second side rack socket on the right side of the truck, through the hole in the suspension sling spreader, and down through the third side rack socket. Secure the ends of the strap according to FM 10-500-2/TO 13C7-1-5.
- ④ Secure the left side of the suspension sling spreader by adapting the procedures in 2 and 3 above.

Figure 6-33. Rear suspension sling spreader installed

6-13. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and deadman's tie as shown in Figure 6-34.



- 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 to install the left front suspension sling as described in 1 above to the left front suspension link.
- ③ Use two 20-foot (4-loop), type XXVI nylon webbing slings and adapt the procedures in 1 and 2 above to install the rear suspension slings to the rear suspension links.
- ④ Pull the suspension slings tight above the load.
- ⑤ Wrap a 24- by 36-inch piece of felt around each front suspension sling 30 inches from the large clevis. Tape the felt in place.
- ⑥ Wrap a 24- by 36-inch piece of felt around each rear suspension sling 65 inches from the large clevis. Tape the felt in place.
- ⑦ Tie each front suspension sling to the windshield tiedown strap with type III nylon cord.
- ⑧ Tie each rear suspension sling to the rear suspension sling spreader with type III nylon cord.
- ⑨ Install a deadman's tie according to FM 10-500-2/TO 13C7-1-5.

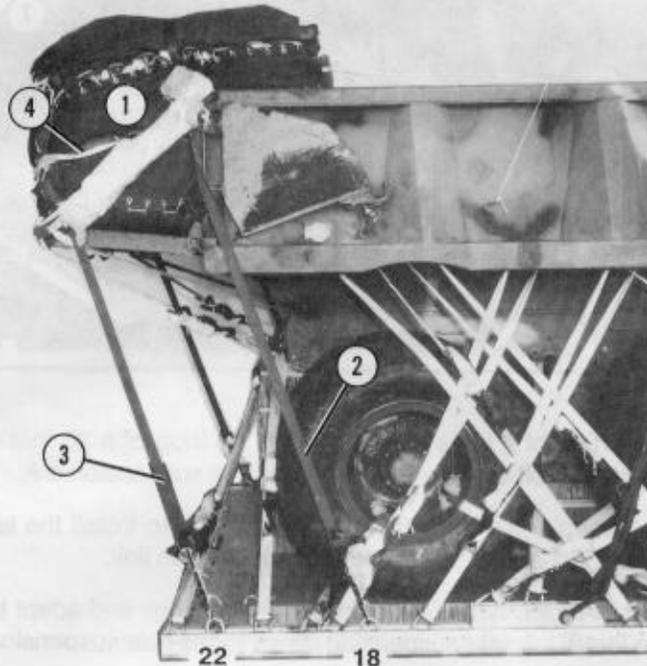
Figure 6-34. Suspension slings and deadman's tie installed

6-14. Stowing Cargo Parachutes

Stow six G-11B cargo parachutes on the truck as shown in Figure 6-35.

NOTICE OF EXCEPTION

The parachute requirements and the parachute restraint straps in this paragraph are not in accordance with those in FM 10-500-2/TO 13C7-1-5. Six G-11B cargo parachutes and type X nylon webbing used as restraint straps are authorized to be used with this load. Follow the procedures shown here.

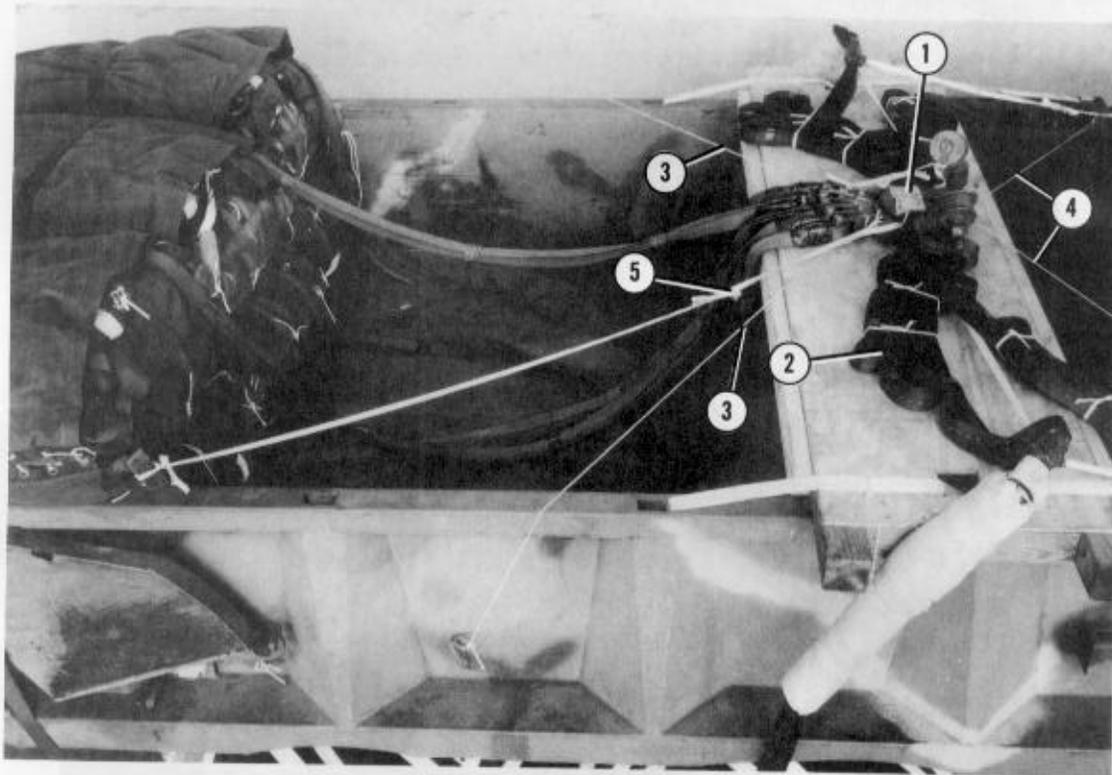


- ① Prepare and position six G-11B cargo parachutes in the rear of the truck as shown. Each parachute requires an 120-foot riser extension. Make sure the riser extensions meet the requirements and restrictions in FM 10-500-2/TO 13C7-1-5.
- ② Install a 10-yard, type X nylon webbing parachute restraint strap over the center of the cargo parachutes, adapting the procedures in FM 10-500-2/TO 13C7-1-5 for eight parachutes. Secure the ends of the strap to tiedown clevises 18 and 18A.
- ③ Install a 10-yard, type X nylon webbing parachute restraint strap at the top of the parachutes, adapting the procedures in FM 10-500-2/TO 13C7-1-5 for eight parachutes. Secure the ends of the strap to tiedown clevises 22 and 22A.
- ④ Install two multicut parachute release straps according to FM 10-500-2/TO 13C7-1-5.

Figure 6-35. Six G-11B cargo parachutes installed

6-15. Installing Release System

Prepare and install the release system as shown in Figure 6-36.

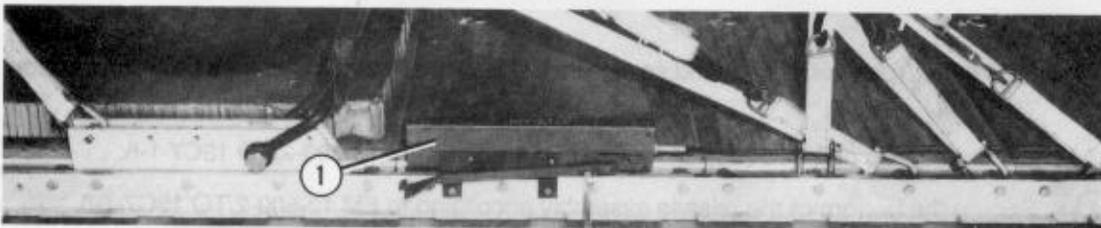
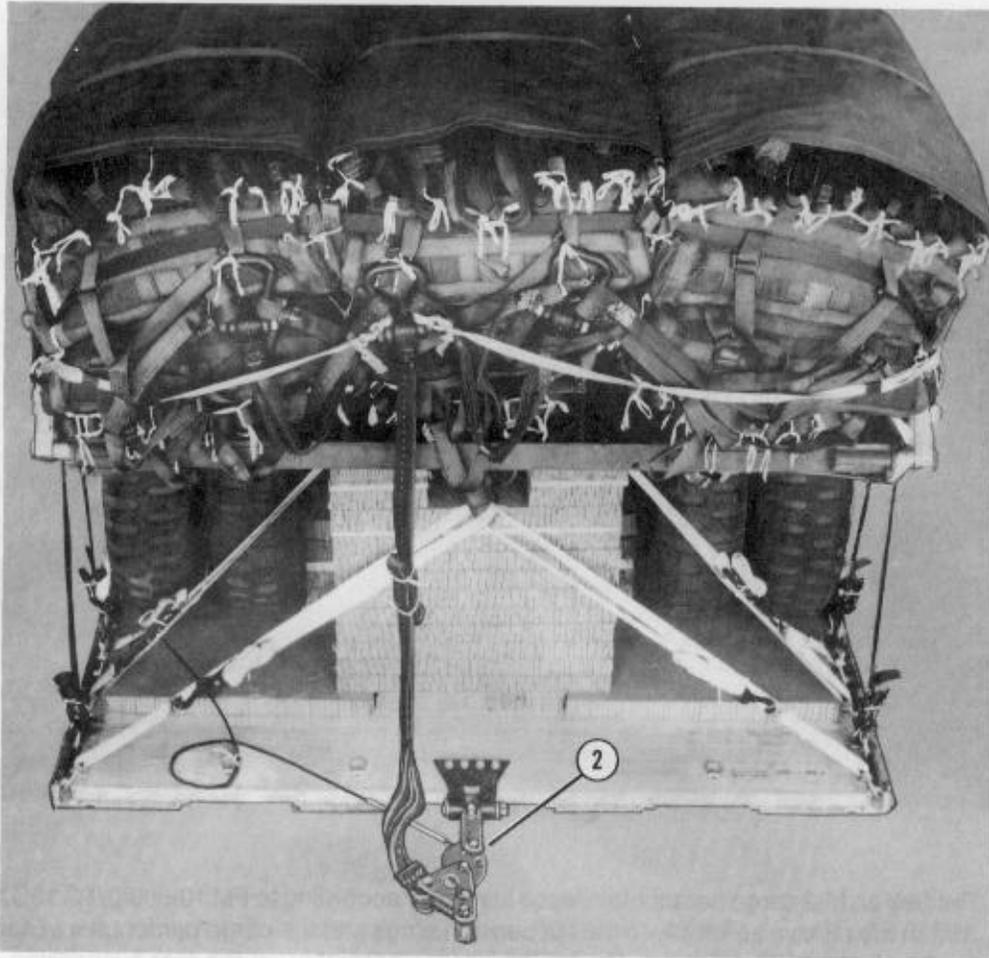


- ① Prepare an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Attach the release assembly to the suspension slings and the cargo parachutes according to FM 10-500-2/TO 13C7-1-5. Center the release assembly on the rear suspension sling spreader.
- ② Fold the suspension slings, 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 6-36. Release system installed

6-16. Installing Extraction System

Install the EFTC extraction system as shown in Figure 6-37.



- ① Attach the type V EFTA mounting brackets to the front mounting holes in the left platform rail.
- ② Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5.

Figure 6-37. Extraction system installed.

6-17. 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.

6-18. 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 as outlined in FM 10-500-2/TO 13C7-1-5.

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

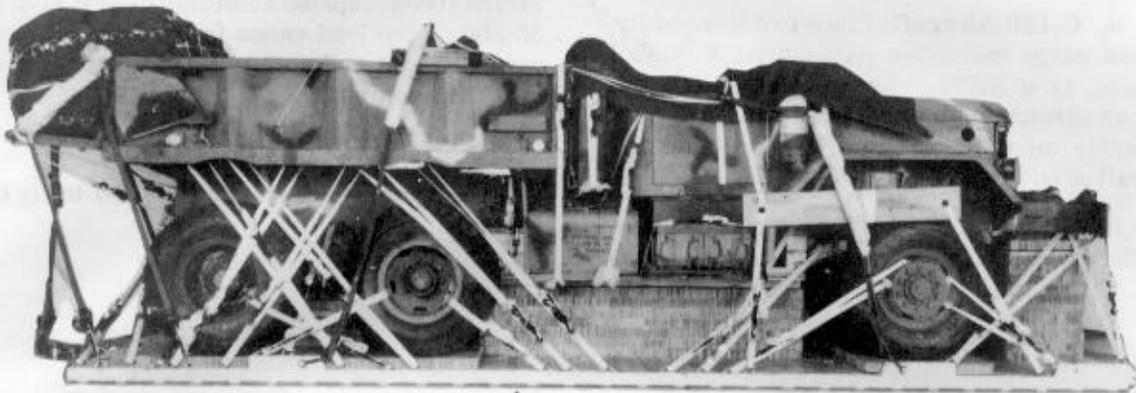
6-19. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 6-38. Complete DD Form 1387-2, 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.

6-20. Equipment Required

Use the equipment listed in Table 6-1 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.



|
 C B

RIGGED LOAD DATA

Weight: Load shown	28,620 pounds
Maximum load allowed	29,120 pounds
Height	99 inches
Width	108 inches
Length	320 inches
Overhang: Front	5 inches
Rear	27 inches
CB (from front edge of platform)	161 inches
Extraction System	EFTC

Figure 6-38. M817, 5-ton dump truck rigged for low-velocity airdrop on a type V platform

Table 6-1. Equipment required for rigging M817, 5-ton dump 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
4030-00-090-5354	Clevis, suspension, 1-in (large)	17
8305-00-242-3593	Cloth, cotton duck, 60-in	1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5782	Coupling, airdrop, extraction force transfer w 24-ft cable	1
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
1670-01-183-2678	Leaf, extraction line	1
	Line, extraction, type XXVI nylon webbing:	
1670-01-064-4454	60-ft (6-loop) (for C-130 aircraft)	1
1670-01-107-7651	140-ft (3-loop) (for C-141 aircraft)	1
	Link assembly:	
1670-00-006-2752	Four-point	2
	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)
5510-00-220-6146	Lumber:	
	2- by 4- by 81 3/4-in	2
	2- by 4- by 87 1/2-in	2
	2- by 4- by 96-in	2
5510-00-220-6248	2- by 10- by 60-in	1
5510-00-220-6274	4- by 4-in:	
	17-in	2
	29 1/2-in	2
	31-in	2
	104-in	2
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	30 sheets
	9- by 18-in	(8)
	12- by 12-in	(4)
	16- by 18-in	(2)

Table 6-1. Equipment required for rigging M817, 5-ton dump truck for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
	24- by 18-in	(2)
	24- by 60-in	(1)
	25- by 12-in	(1)
	25- by 18-in	(2)
	25- by 24-in	(1)
	27- by 24-in	(2)
	36- by 12-in	(10)
	36- by 24-in	(12)
	45- by 18-in	(8)
	45- by 24-in	(4)
	54- by 18-in	(4)
	96- by 36-in	(10)
	Parachute:	
1670-01-016-7841	Cargo, G-11B	6
1670-00-040-8135	Cargo, extraction, 28-ft, heavy-duty (for C-130 aircraft)	2
	Platform, airdrop, type V, 24-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2372	Clevis, load tiedown	(46)
1670-01-162-2376	Extraction bracket assembly	(1)
1670-01-247-2389	Suspension link	(4)
1670-01-162-2381	Tandem link	(2)
5530-00-128-4981	Plywood, 3/4- by 48- by 96-in:	5 sheets
	4- by 96-in	(4)
	12- by 12-in	(3)
	13- by 95-in	(2)
	18- by 60-in	(1)
	24- by 94 1/2-in	(1)
	33 1/4- by 95-in	(1)
	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)

Table 6-1. Equipment required for rigging M817, 5-ton dump truck for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
1670-01-097-8817	Release, cargo parachute, M-2	1
	Sling, cargo, airdrop, type XXVI nylon	
	webbing:	
1670-00-432-2499	3-ft (4-loop)	4
1670-01-062-6305	9-ft (4-loop)	1
1670-01-062-6307	12-ft (4-loop)	2
1670-01-062-6308	16-ft (4-loop)	2
1670-01-062-6302	20-ft (2-loop) (riser extension)	24
1670-01-064-4453	20-ft (4-loop)	2
1670-00-040-8219	Strap, parachute release, multicut, comes	
	w 3 knives (Use only 2 knives on each line.)	2
	Support, mainframe:	1
	Lumber:	
No NSN	2- by 2- by 45-in	(1)
No NSN	2- by 2- by 81 1/4-in	(1)
5510-00-220-6146	2- by 4- by 9 3/4-in	(2)
5510-00-220-6448	2- by 6- by 6-in	(2)
5510-00-220-6448	2- by 6- by 33 1/4-in	(3)
5510-00-220-6250	2- by 12- by 95-in	(2)
5510-00-220-6274	4- by 4- by 33 1/4-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)
	13 1/2- by 96-in	(6)
	33- by 96-in	(2)
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	68
	Webbing:	
8305-00-268-2411	Cotton, type I, 1/4-inch	As required
8305-00-082-5752	Nylon, tubular, 1/2-in	As required
8305-00-261-8584	Nylon, type X, treated	20 yd