

CHAPTER 8

**RIGGING TWO M119 HOWITZERS FOR LOW-VELOCITY AIRDROP
ON TYPE V PLATFORM**

Section I

**RIGGING HOWITZERS
WITH EIGHTY-TWO BOXES OF AMMUNITION**

8-1. Description of Load

Two M119, 105-millimeter howitzers (line number H57505) are rigged on a 20-foot, type V airdrop platform with an accompanying load of 82 boxes of ammunition and 21 cans of fuzes (when required). This load requires five G-11B cargo parachutes.

8-2. Preparing Platform

Prepare a 20-foot, type V airdrop platform as described below.

a. Inspecting Platform. Inspect, or assemble and inspect, the 20-foot type V airdrop platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.

b. Installing Suspension Links. Install the suspension links on the assembled platforms according to FM 10-500-2/TO 13C7-1-5.

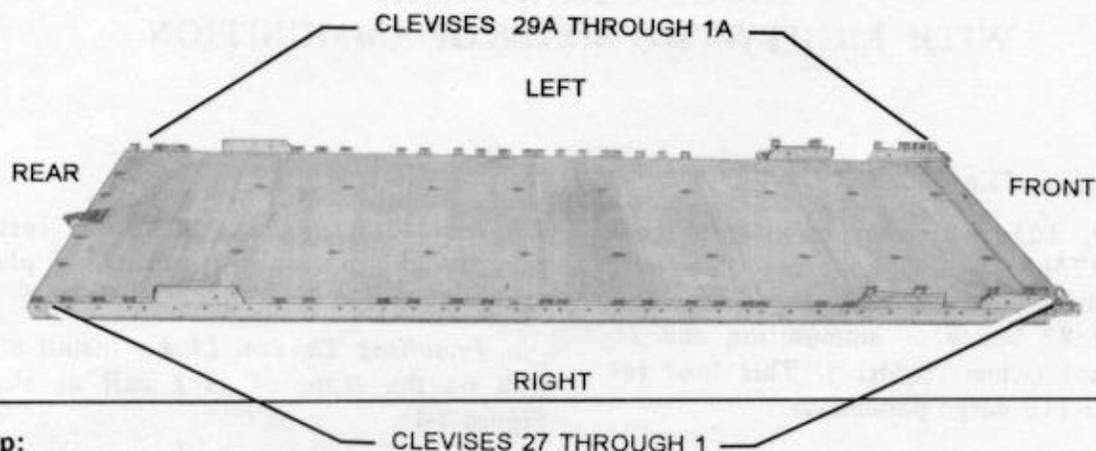
c. Installing Tandem Links. Install a tandem link on the front of each rail as shown in Figure 8-1.

d. Installing Nose Bumper. The nose bumper must be installed for this load.

e. Installing and Numbering Clevises. Bolt and number 58 clevis assemblies as shown in Figure 8-1.

Note: If the platform must be assembled, install the suspension links when assembling the platform. See Figure 8-1 for the location of the suspension links.

Note: Measurements given in this chapter are from the front edge of the platform, NOT from the front edge of the nose bumper.



Step:

1. Install a suspension link in holes 6, 7, and 8 on each platform side rail. Face the flat part of the link to the front of the rail.
2. Install a tandem link on the front of each platform side rail using holes 1, 2 and 3.
3. Install a suspension link in holes 33, 34, and 35. Face the flat part of the link to the rear of the rail.
4. Install clevises on bushings 1, 2, 3, and 4 of each front tandem link. Bolt two additional clevises to each of the clevises bolted on bushing 1.
5. Install clevises on bushings 2 and 4 of each front suspension link.
6. Starting at the front of the right platform side rail, install clevises on the bushings bolted on holes 9, 10, 12, 13, 14, 15, 17, 18, 20, 21, 23, 24, 26, 27, 30, 31, 37, 38, 39, and 40.
7. Starting at the front of the left platform side rail, install clevises on the bushings bolted on holes 4, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 30, 31, 37, 38, 39, and 40.
8. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 27. Starting at the front of the platform, number the clevises bolted to the left side from 1A through 29A.
9. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

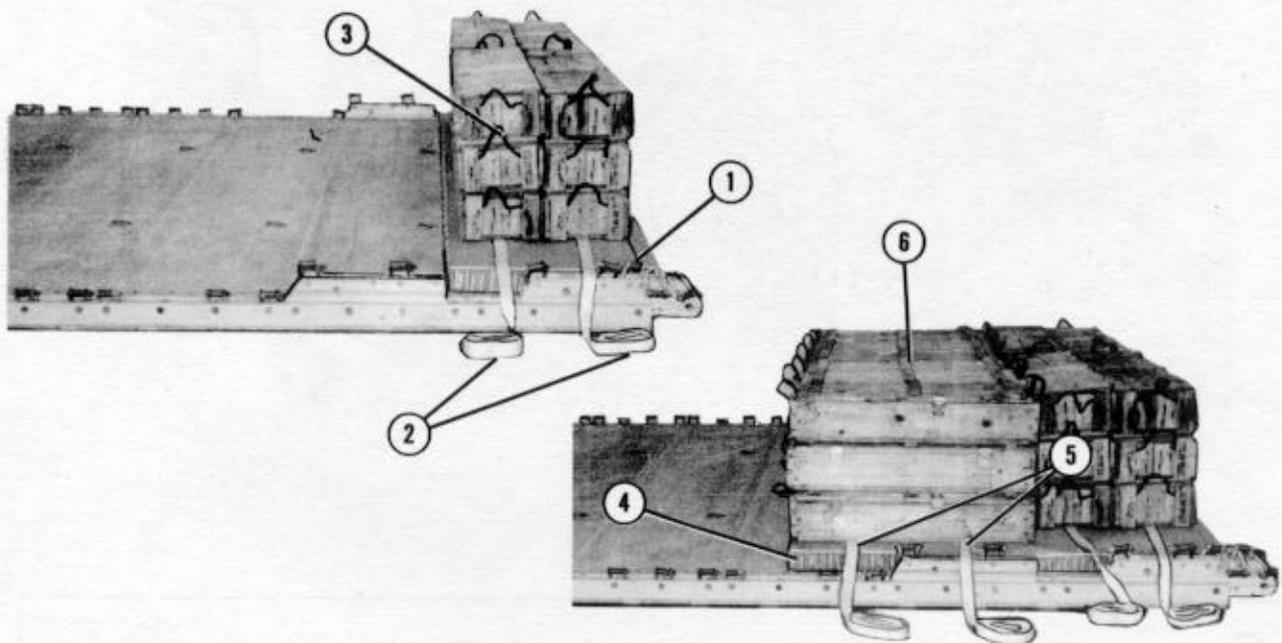
Figure 8-1. Platform prepared

8-3. Stowing and Lashing First Group of Ammunition Boxes

Stow 54 boxes of ammunition on the platform and lash the ammunition boxes together as shown in

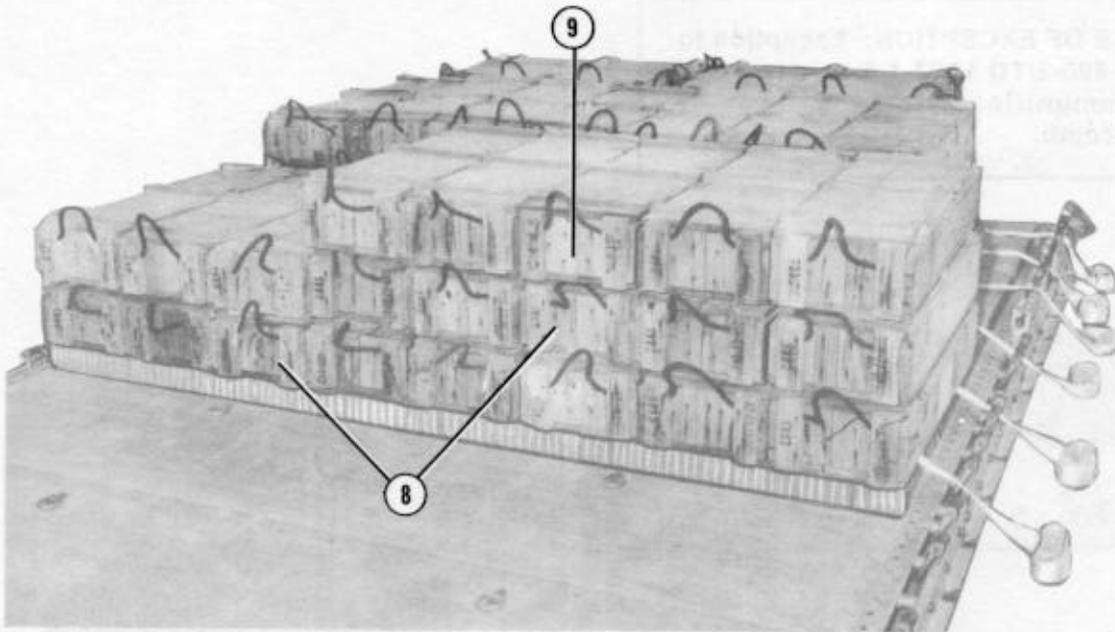
Figure 8-2. Lash the ammunition to the platform as shown in Figure 8-3.

NOTICE OF EXCEPTION: Exception to FM 10-500-2/TO 13C7-1-5 is granted to rig ammunition with one layer of honeycomb.



- ① Center a 96- by 26-inch piece of honeycomb 3/4 inch from the front edge of the platform.
- ② Center two 30-foot lashings 12 inches apart across the honeycomb.
- ③ Place twelve ammunition boxes flush over the lashings and honeycomb.
- ④ Place a 96- by 36-inch piece of honeycomb flush against the piece placed in step 1.
- ⑤ Center two 30-foot lashings 18 inches apart across the honeycomb.
- ⑥ Place 21 ammunition boxes over the lashings and honeycomb as shown.

Figure 8-2. First group of ammunition boxes stowed



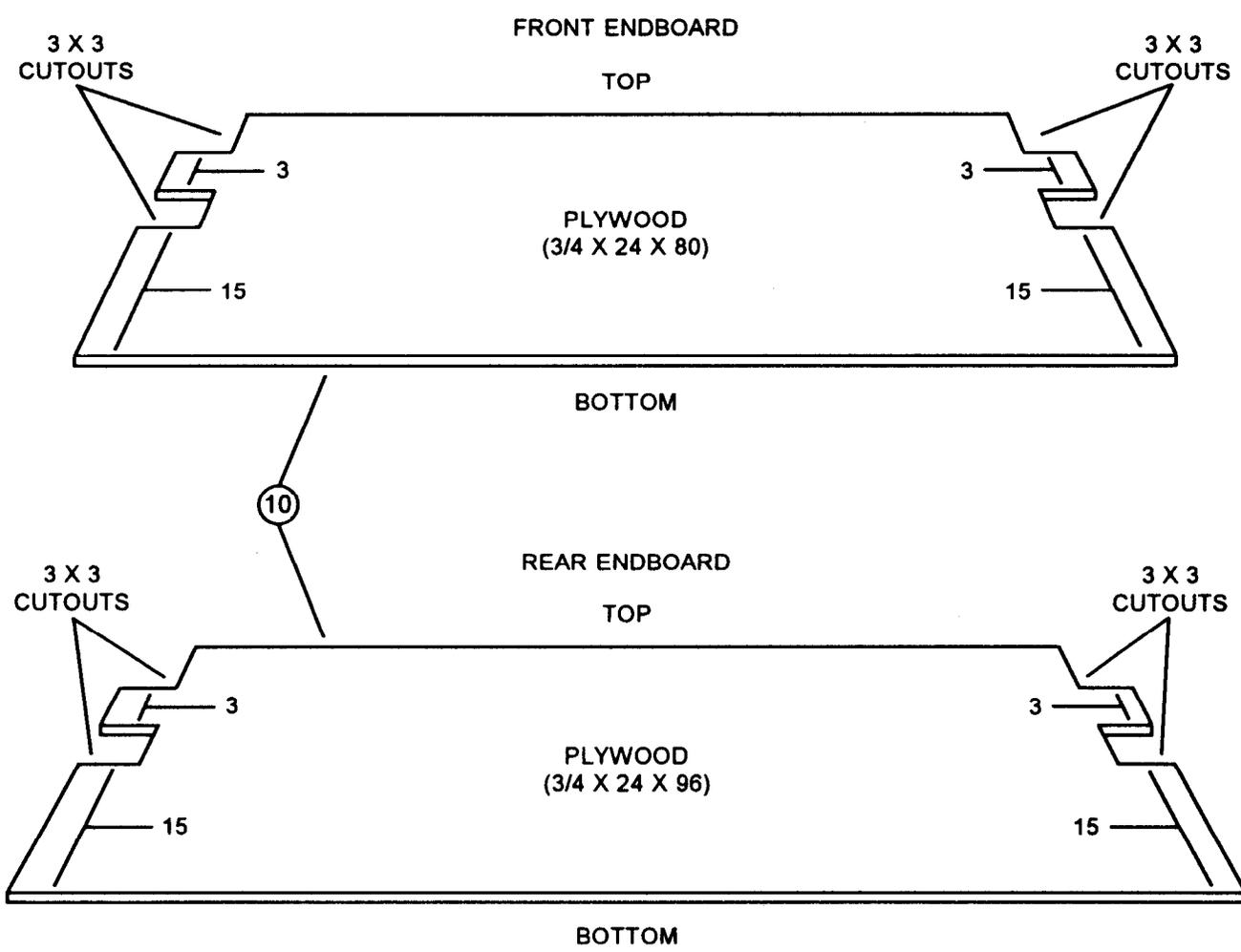
- ⑦ Place a 96- by 36-inch piece of honeycomb flush against the honeycomb placed in step 4. Place two 30-foot lashings on the honeycomb as in step 5.
- ⑧ Place two layers of eight boxes each flush over the lashings and honeycomb.

Note: Allow four inches between the bottom left box and the platform side rail. If all boxes do not rest solidly on the honeycomb, substitute two layers of honeycomb for this box. Insufficient clearance in this area may interfere with EFTC actuator installation.

- ⑨ Place five boxes on the right side of the stack as shown.

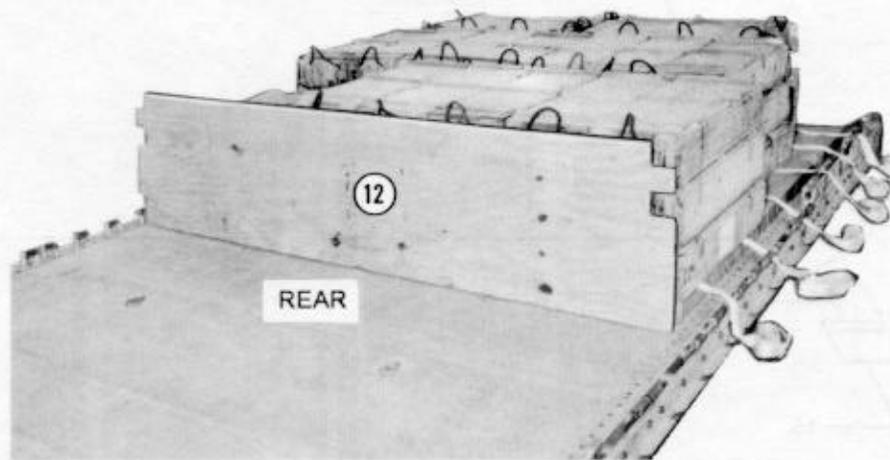
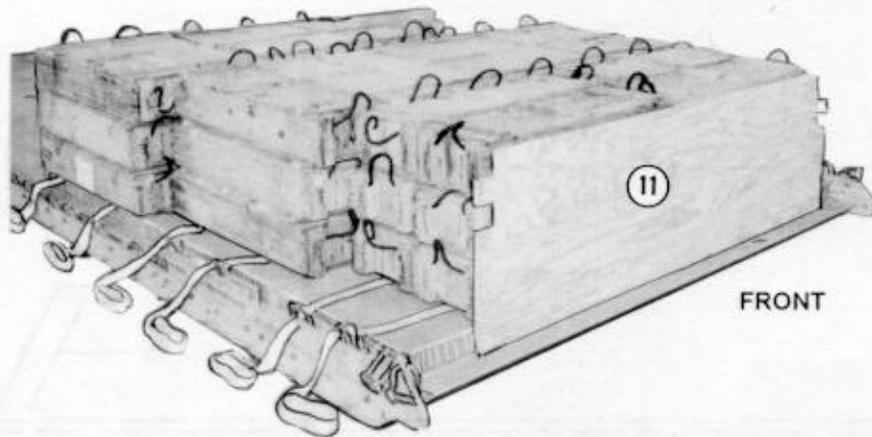
Figure 8-2. First group of ammunition boxes stowed (continued)

Notes: 1. All measurements are in inches
2. These drawings are not drawn to scale.



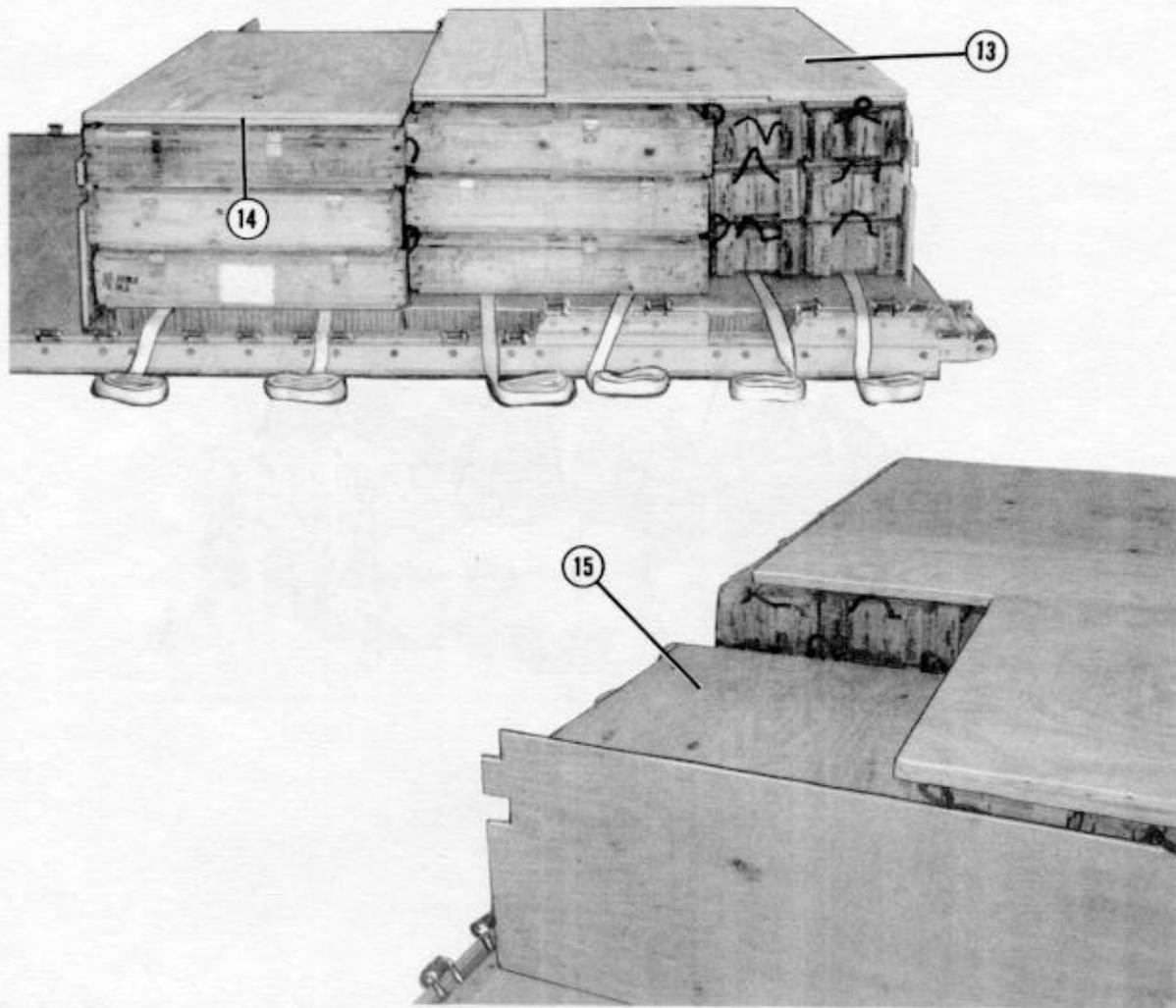
10 Cut the front and rear endboards for the first group of ammunition from 3/4-inch plywood as shown.

Figure 8-2. First group of ammunition boxes stowed (continued)



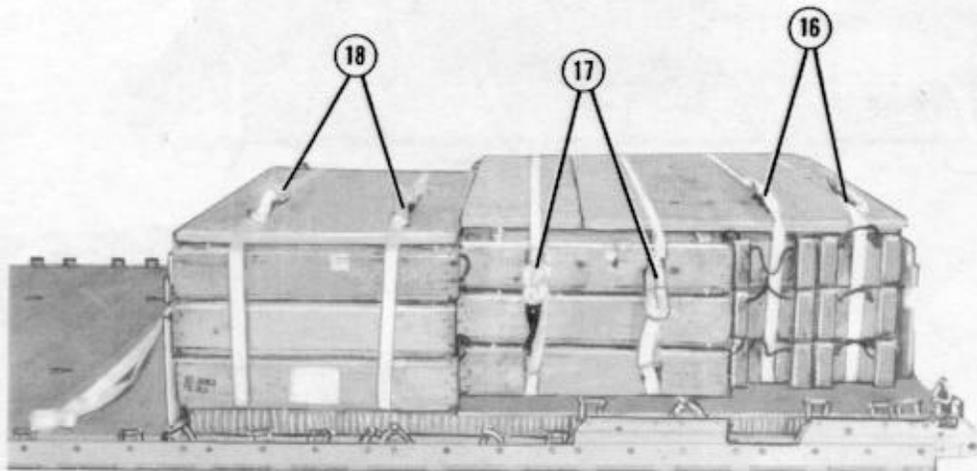
- ⑪ Place the front endboard against the front of the boxes.
- ⑫ Place the rear endboard against the rear of the boxes.

Figure 8-2. First group of ammunition boxes stowed (continued)



- ⑬ Cover the first three rows of boxes with two layers of 3/4-inch plywood. Alternate two 74- by 17-inch and two 74- by 45-inch pieces as shown.
- ⑭ Cover the rear row of boxes with two layers of 3/4- by 60- by 37-inch plywood placed flush along the right side of the boxes.
- ⑮ Place two 3/4- by 34- by 30-inch layers of plywood in the vacant area in the left rear.

Figure 8-2. First group of ammunition boxes stowed (continued)

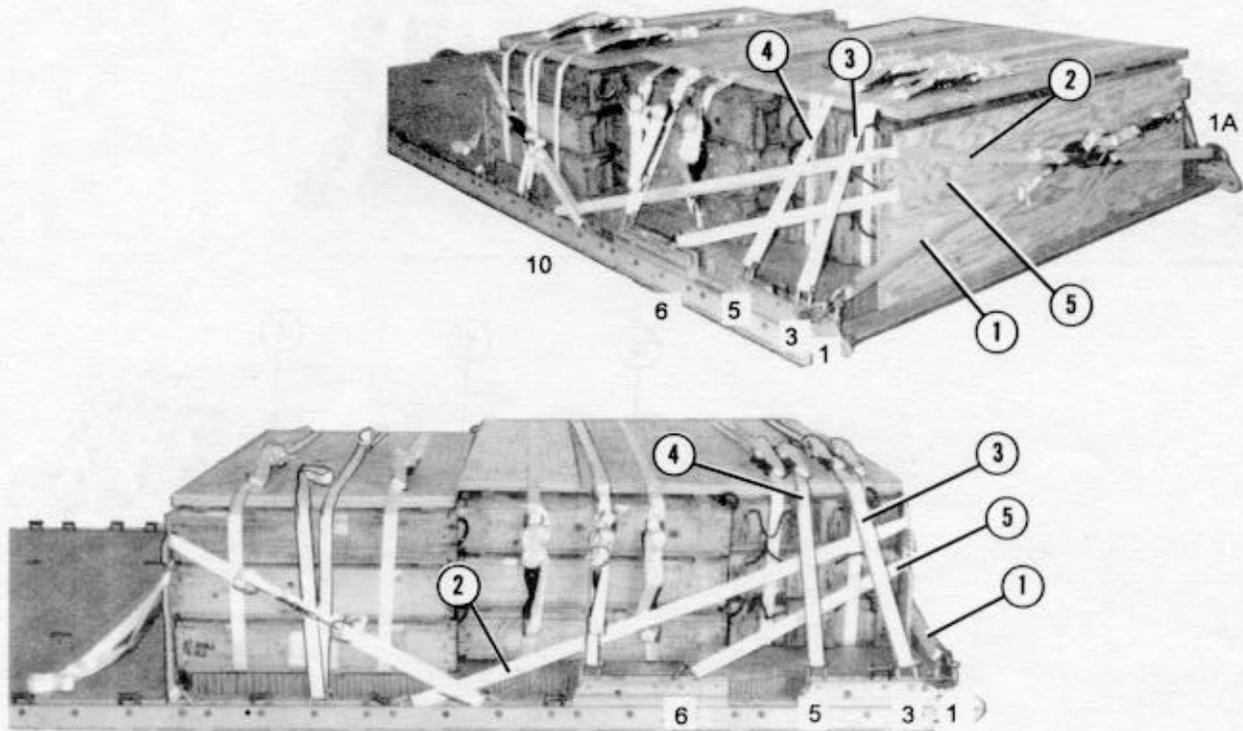


- ①⑥ Secure the lashings pre-positioned in step 2 as far to the right as possible on top of the boxes.
- ①⑦ Secure the two lashings pre-positioned in step 5 on the right side.
- ①⑧ Secure the two lashings pre-positioned in step 7 on top of the boxes.

Note: It will be necessary to leave these lashings unsecured if the metal boxes of fuzes will be included in this load.

Figure 8-2. First group of ammunition boxes stowed (continued)

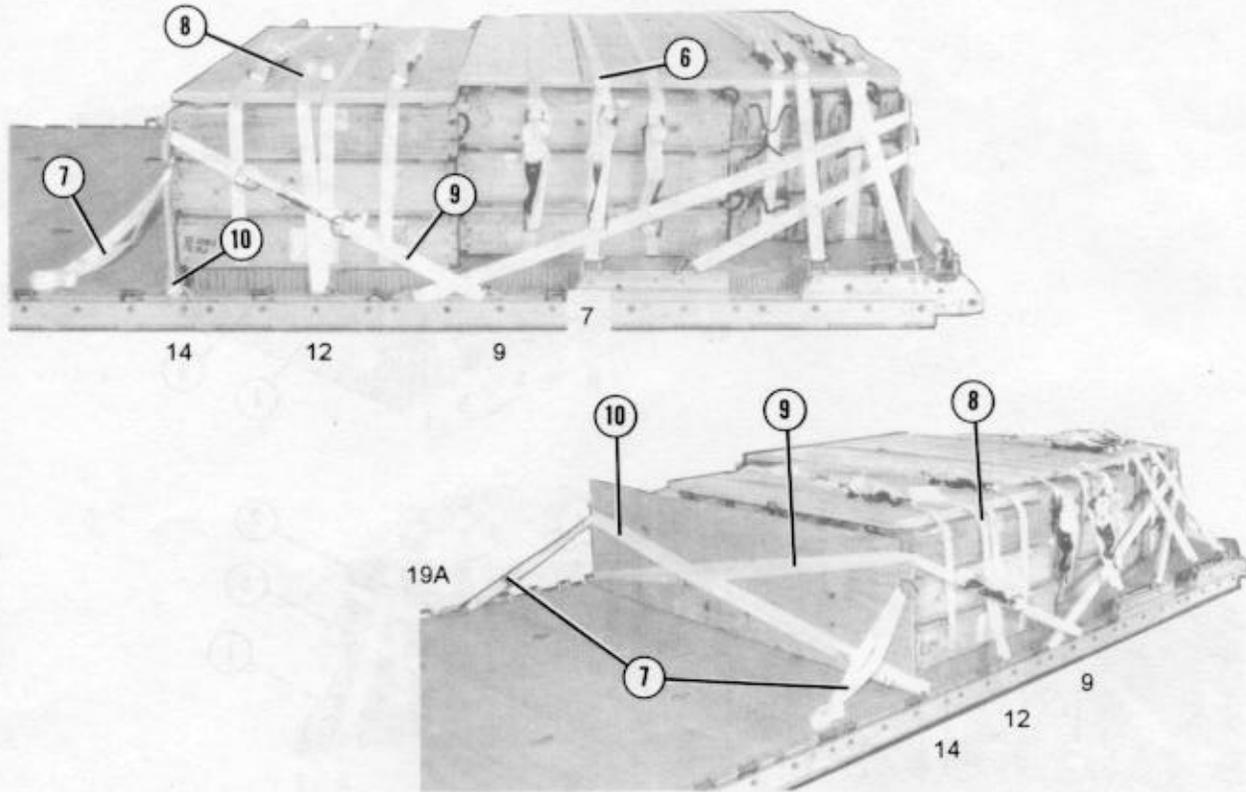
Note: Lashings used below are all 30-foot lashings.



Lashing Number	Tie-Down Clevis Number	Instructions
1	1 and 10A	Pass lashing: Through clevis 1, through the left lower cutout in the front endboard, and through clevis 10A. Secure the lashing in front.
2	1A and 10	Through clevis 1A, through the right upper cutout in the front endboard, and through clevis 10. Secure the lashing in front.
3	3 and 3A	Through both clevises and over the top of the load. Secure the lashing on the top right.
4	5 and 5A	Through both clevises and over the top of the load. Secure the lashing on the top right.
5	6 and 7A	Through both clevises and through the lower cutouts in the front endboard. Secure the lashing in front.

Figure 8-3. First group of ammunition boxes lashed to platform

Note: Lashings used below are all 30-foot lashings.

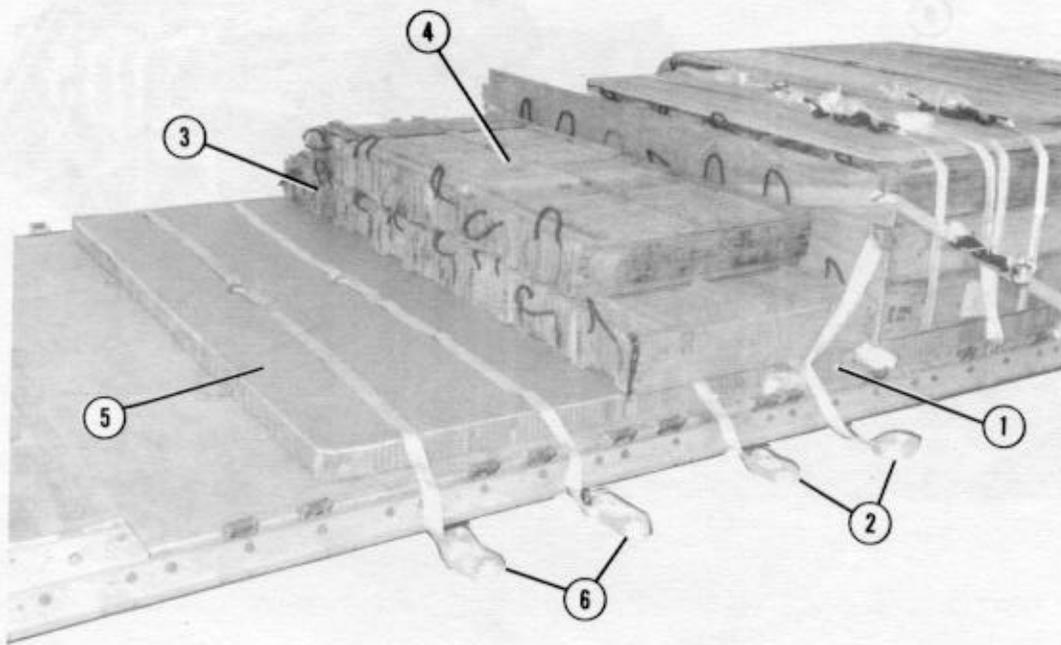


Lashing Number	Tie-Down Clevis Number	Instructions
6	7 and 8A	Pass lashing: Through both clevises and over the top of the load. Secure the lashing on the side.
7	19A	Through clevis 19A and through both lower cutouts in the rear endboard. Do not secure this lashing.
8	12 and 11A	Through both clevises and over the top of the load. Do not secure this lashing.
9	9 and 13A	Through clevis 9, through the right upper cutout in the rear endboard, and through clevis 13A. Secure the lashing on the side.
10	14 and 9A	Through clevis 14, through the left lower cutout in the rear endboard, and through clevis 9A. Secure the lashing on the side.

Figure 8-3. First group of ammunition boxes lashed to platform (continued)

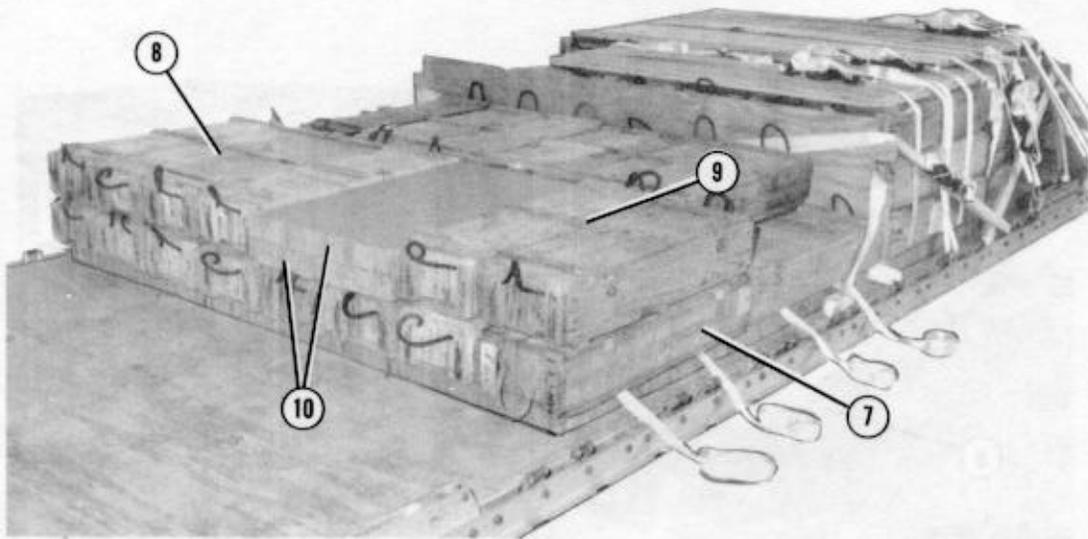
8-4. Stowing and Lashing Second Group of Ammunition Boxes

Stow 28 boxes of ammunition on the platform and lash the boxes together as shown in Figure 8-4. Lash the ammunition to the platform as shown in Figure 8-5.



- ① Center a 96- by 36-inch piece of honeycomb against the second endboard.
- ② Center two 30-foot lashings 18 inches apart on the honeycomb.
- ③ Place eight boxes flush over the honeycomb and lashings.
- ④ Place six boxes over those placed in step 3, leaving an empty space on the left and right.
- ⑤ Center a 96- by 36-inch piece of honeycomb against the honeycomb placed in step 1.
- ⑥ Place two 30-foot lashings on the honeycomb as in step 2.

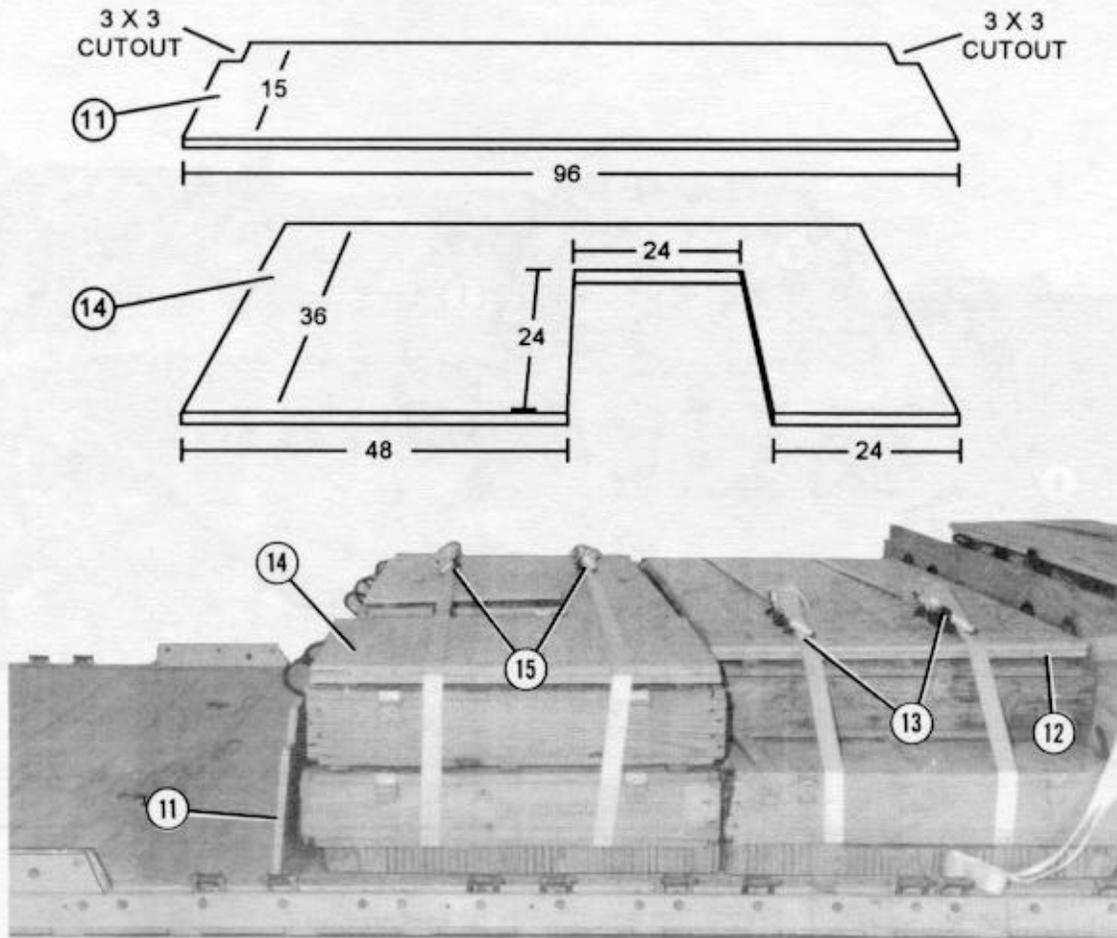
Figure 8-4. Second group of ammunition boxes stowed



- ⑦ Place eight boxes flush over the honeycomb and lashings.
- ⑧ Place four boxes on the left side of the stack.
- ⑨ Place two boxes on the right side of the stack.
- ⑩ Place two 24- by 38-inch pieces of honeycomb in the empty space.

Figure 8-4. Second group of ammunition boxes stowed (continued)

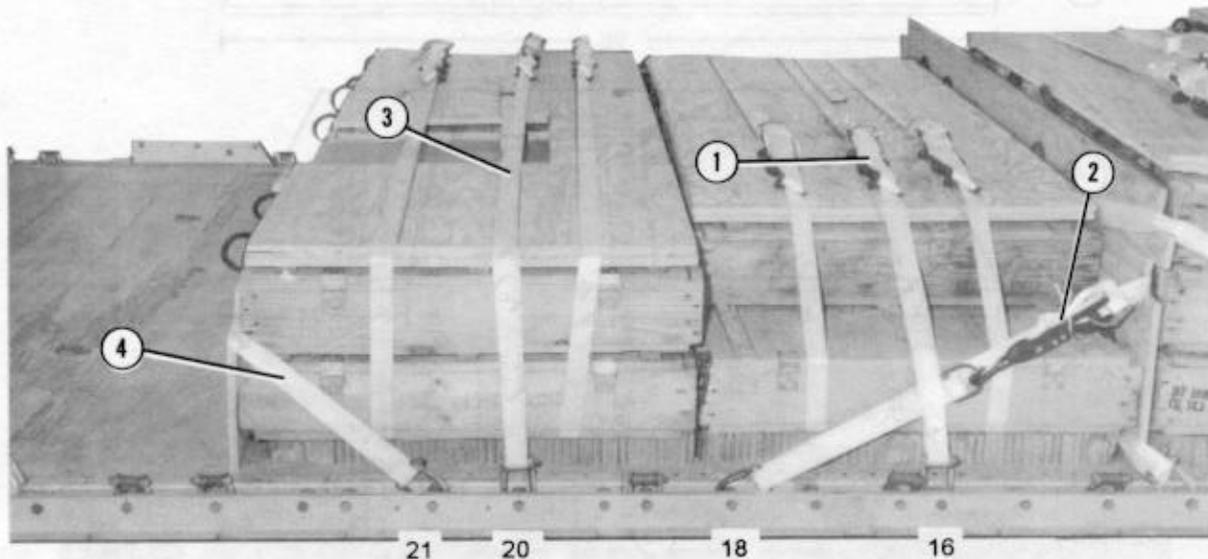
Notes: 1. All measurements are given in inches.
2. These drawings are not drawn to scale.



- ⑪ Construct the rear endboard of 3/4- by 96- by 15-inch plywood as shown. Place the endboard against the rear of the boxes.
- ⑫ Place two 3/4- by 74- by 36-inch pieces of plywood flush over the first stack of boxes.
- ⑬ Secure the lashings placed in step 2 over the load.
- ⑭ Make the cutout as shown in two 3/4- by 96- by 36-inch pieces of plywood. Place the plywood over the last row of boxes with the cutout facing the rear.
- ⑮ Secure the lashings placed in step 6 on top of the boxes, as far to the left as possible.

Figure 8-4. Second group of ammunition boxes stowed (continued)

Note: Lashings used below are all 30-foot lashings.



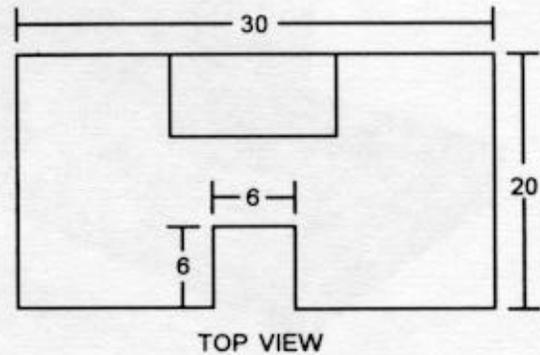
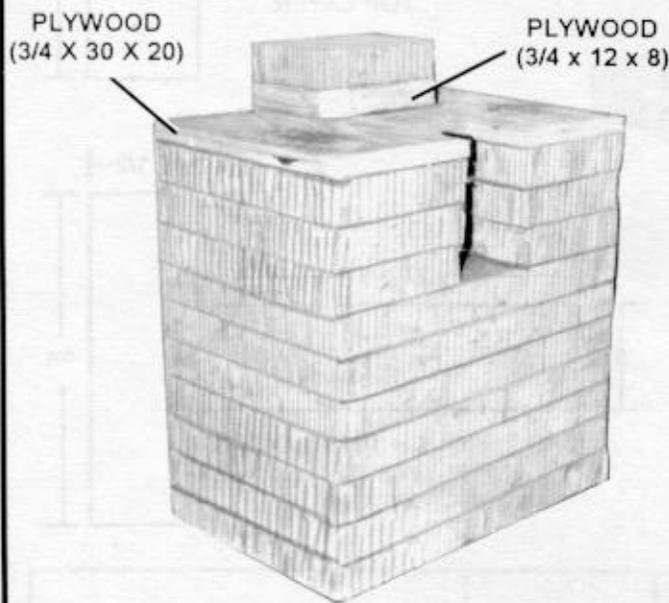
Lashing Number	Tie-Down Clevis Number	Instructions
1	16 and 17A	Pass lashing: Through both clevises and over the top of the load. Secure the lashing on top.
2	18 and 19A	Pre-positioned in Figure 8-3 through clevis 18. Pass the lashing through the lower cutouts in the second endboard. Secure the lashing on the right.
3	20 and 22A	Through both clevises and over the top of the load. Secure the lashing on top and as far to the left as possible.
4	21 and 23A	Through both clevises and through the cutouts in the rear endboard. Secure the lashing in the rear.

Figure 8-5. Second group of ammunition boxes lashed to platform

8-5. Building and Placing Honeycomb Stacks

Build the honeycomb stacks for the howitzers as shown in Figure 8-6. Place the stacks as shown in Figure 8-7.

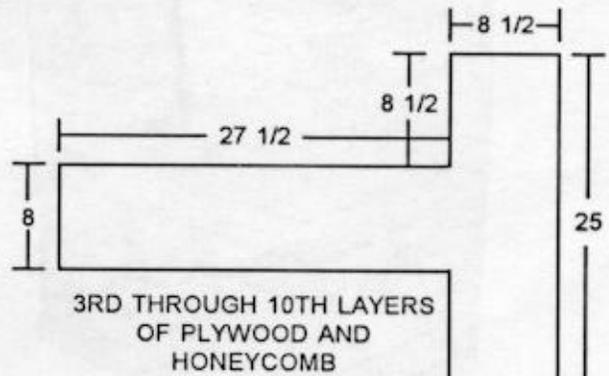
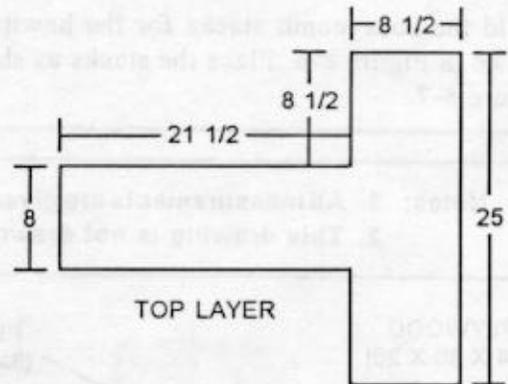
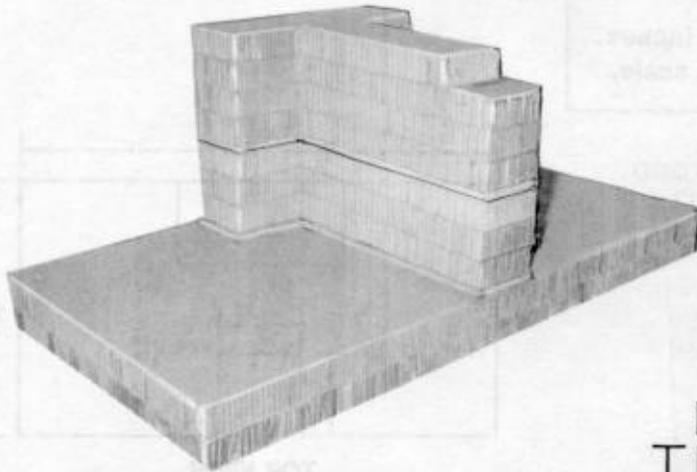
- Notes:** 1. All measurements are given in inches.
2. This drawing is not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1 and 4	7	30	20	Honeycomb	Form stack.
	3	30	20	Honeycomb	Center a cut 6 inches wide and 6 inches deep in a 30-inch side. Place these pieces flush on the stack.
	2	30	20	3/4-inch plywood	Make cuts as above and place on honeycomb.
	3	12	8	3/4-inch plywood	Glue flush along uncut 30-inch edge and centered.
	1	12	8	Honeycomb	Glue flush over plywood placed above.

Figure 8-6. Honeycomb stacks prepared

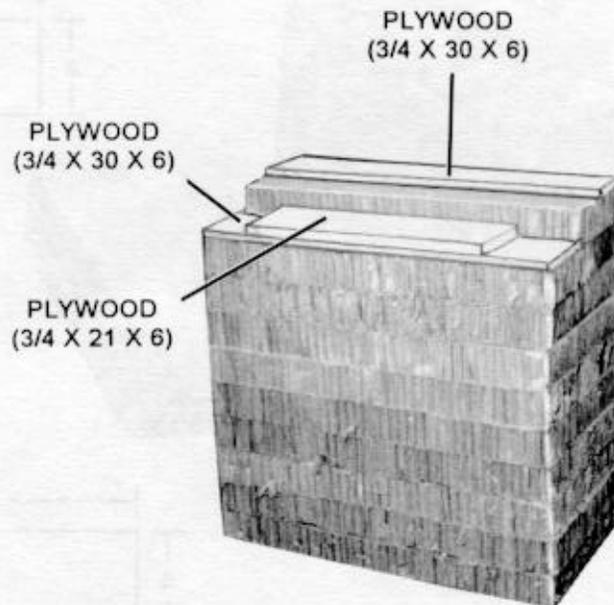
Notes: 1. All measurements are given in inches.
2. These drawings are not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
2	2	72	36	Honeycomb	Stack honeycomb to form base.
	1	25	36	3/4-inch plywood	Make cutouts as shown, and center on base.
	3	25	36	Honeycomb	Make cutouts as shown, and place flush on plywood.
	1	25	36	3/4-inch plywood	Make cutouts as shown, and place flush on honeycomb.
	3	25	36	Honeycomb	Make cutouts as shown, and place flush on plywood.
	1	25	30	Honeycomb	Make cutouts as shown and place flush on top.

Figure 8-6. Honeycomb stacks prepared (continued)

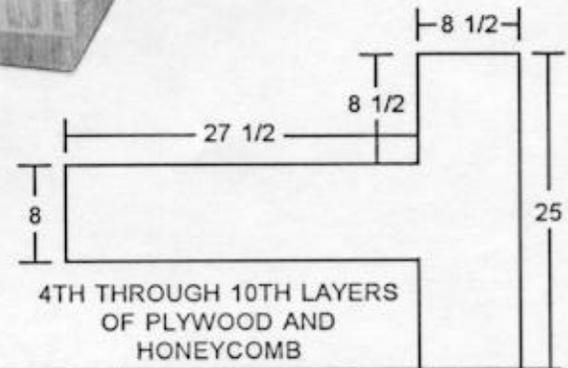
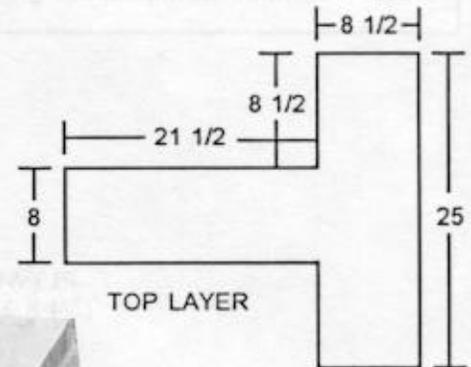
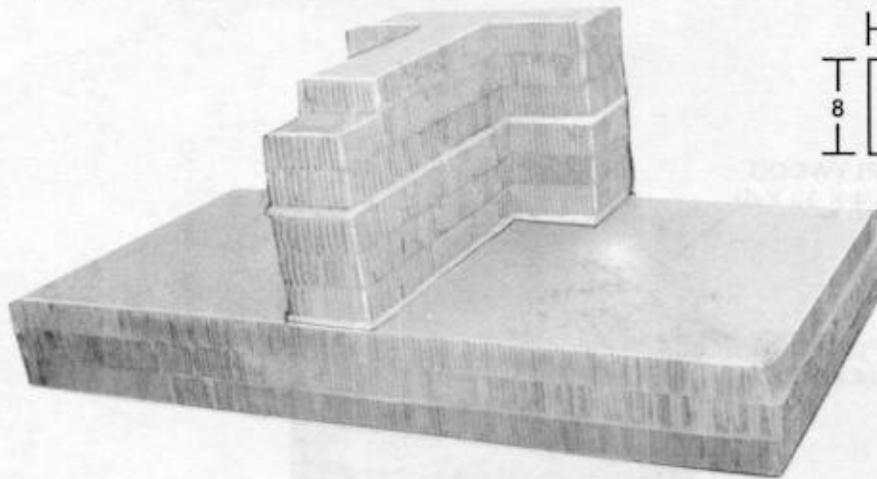
Note: All measurements are given in inches.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
3	9	30	16	Honeycomb	Form base.
	1	30	10	Honeycomb	Place honeycomb even with one edge of base.
	1	30	6	3/4-inch plywood	Place plywood flush along outside edge of honeycomb placed above.
	1	30	6	3/4-inch plywood	Place plywood flush on base next to honeycomb placed above.
	1	21	6	3/4-inch plywood	Center plywood on the lower piece of plywood.

Figure 8-6. Honeycomb stacks prepared (continued)

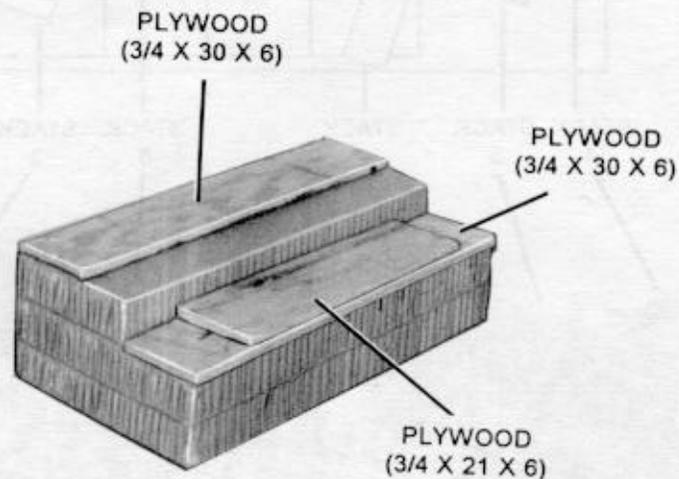
Notes: 1. All measurements are given in inches.
2. These drawings are not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
5	3	72	36	Honeycomb	Stack to form a base.
	1	25	36	3/4-inch plywood	Make cutouts as shown, and center on base.
	3	25	36	Honeycomb	Make cutouts as shown, and place flush on plywood.
	1	25	36	3/4-inch plywood	Make cutouts as shown, and place flush on honeycomb.
	2	25	36	Honeycomb	Make cutouts as shown, and place flush on plywood.
	1	25	30	Honeycomb	Make cutouts as shown, and place flush on top.

Figure 8-6. Honeycomb stacks prepared (continued)

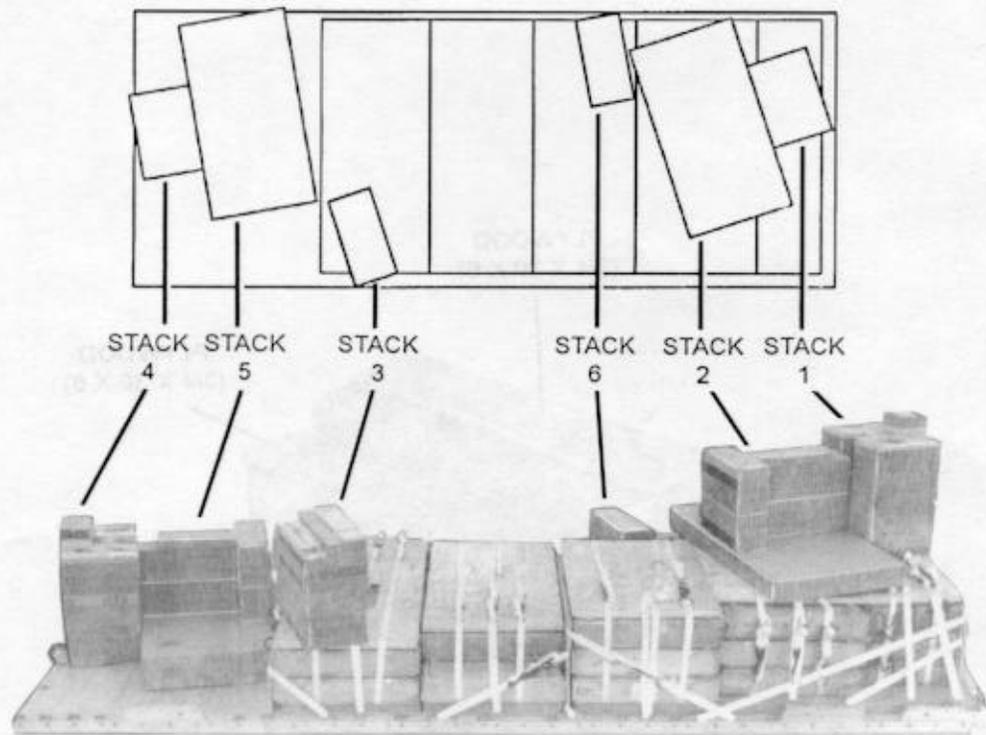
Note: All measurements are given in inches.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
6	2	30	16	Honeycomb	Stack to form base.
	1	30	10	Honeycomb	Place honeycomb even with one edge of base.
	1	30	6	3/4-inch plywood	Place plywood flush along outside edge of honeycomb placed above.
	1	30	6	3/4-inch plywood	Place plywood flush on base next to honeycomb placed above.
	1	21	6	3/4-inch plywood	Center plywood on the lower piece of plywood.

Figure 8-6. Honeycomb stacks prepared (continued)

Note: This drawing is not drawn to scale.



Note: Stack locations are approximate. Exact placement will vary because of differences in individual guns. Be sure that the stacks rest solidly on the platform or on the plywood decking.

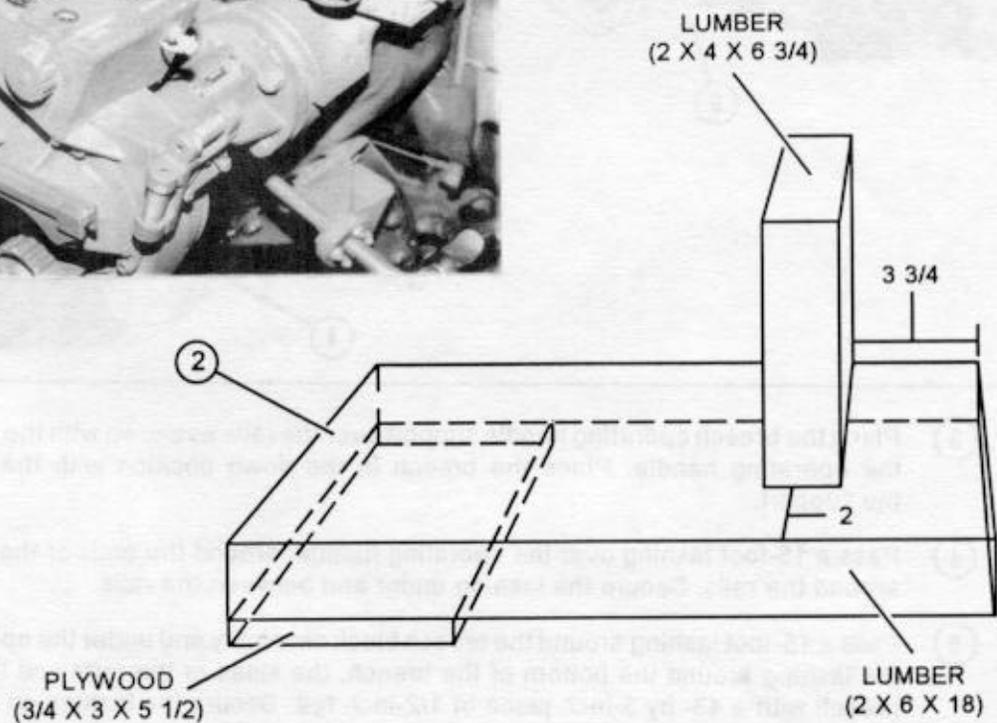
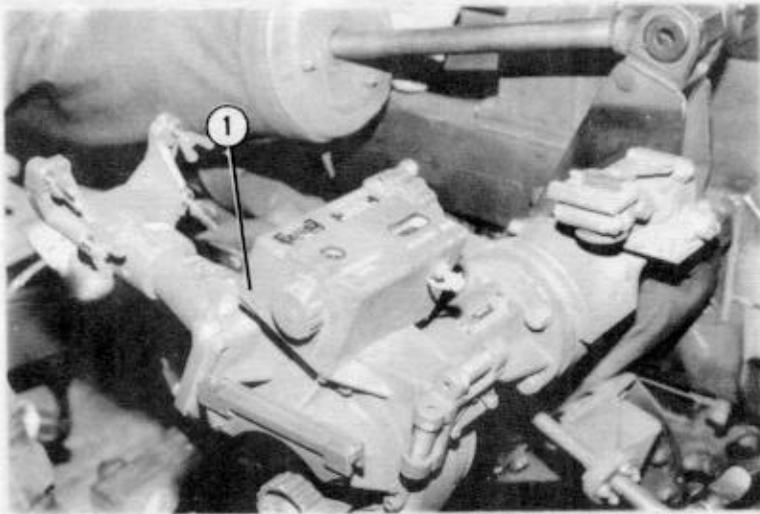
Stack Number	Position of Stack
1	Place on the plywood decking with the right front corner 28 inches from the right front corner of the plywood, and the left front corner of the stack 4 inches from the front edge of the plywood.
2	Center the front edge against stack 1.
3	Align on the rear section of plywood decking on a central axis with stacks 1 and 2.
4	Place at the rear of the platform, with the right rear corner of the stack 34 inches from the right rail. Let the left side of the stack overhang the rear edge of the platform from the point at which the extraction bracket meets the rear edge of the platform.
5	Center in front of stack 4.
6	Align on the third ammunition stack on a central axis with stacks 4 and 5.

Figure 8-7. Honeycomb stacks placed

8-6. Preparing Howitzers

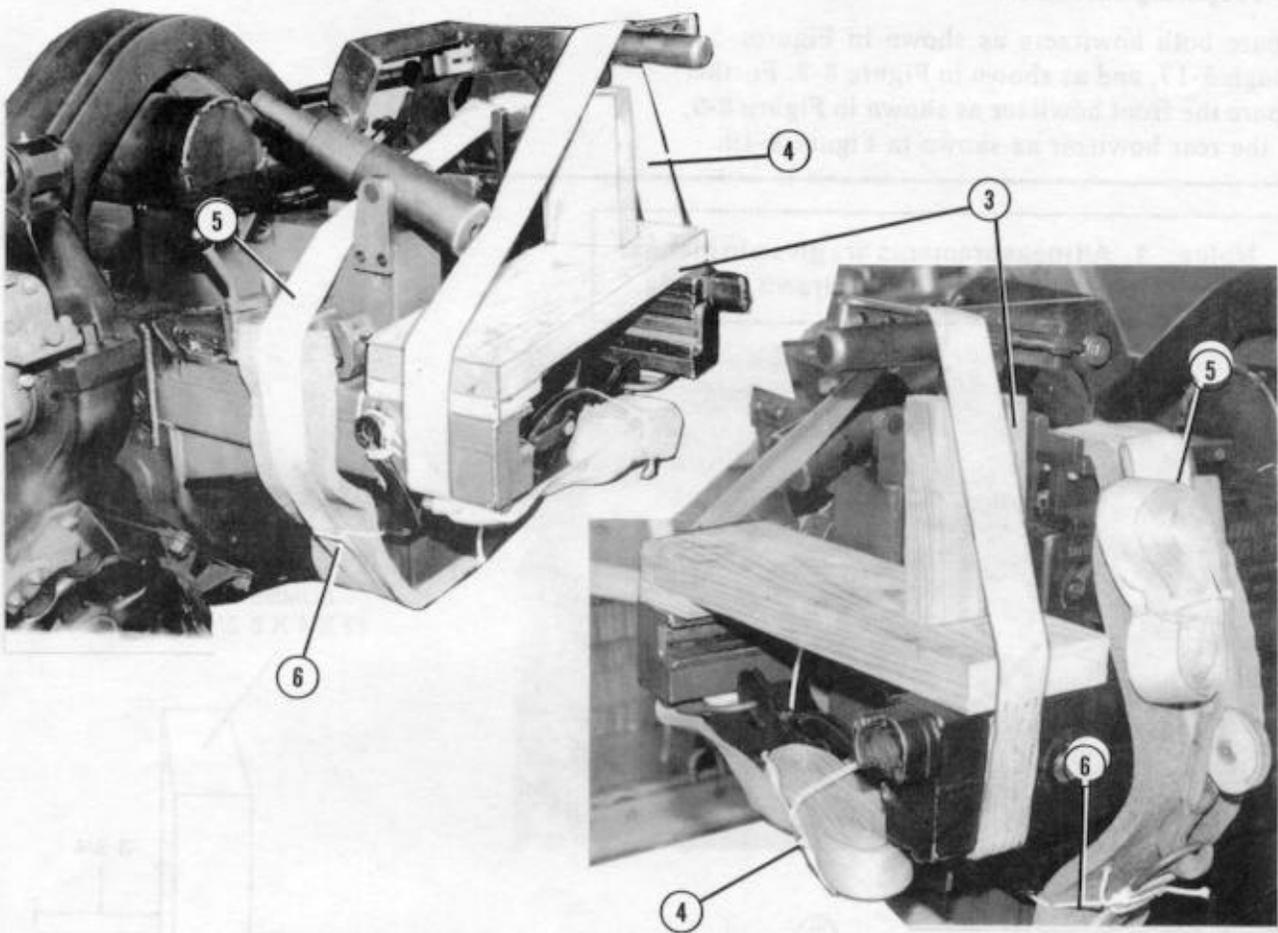
Prepare both howitzers as shown in Figures 5-9 through 5-17, and as shown in Figure 8-8. Further prepare the front howitzer as shown in Figure 8-9, and the rear howitzer as shown in Figure 8-10.

Notes: 1. All measurements are given in inches.
2. This drawing is not drawn to scale.



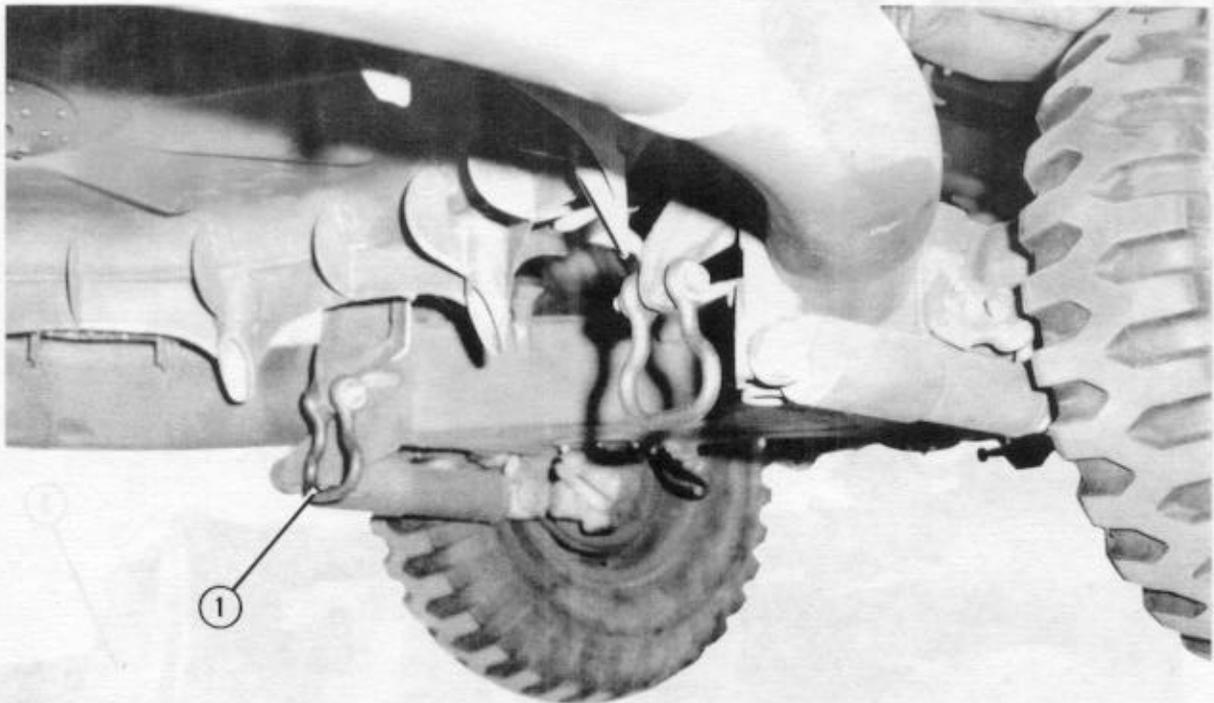
- ① Tilt the left sight assembly forward.
- ② Construct the breech operating handle support as shown.

Figure 8-8. Both howitzers prepared



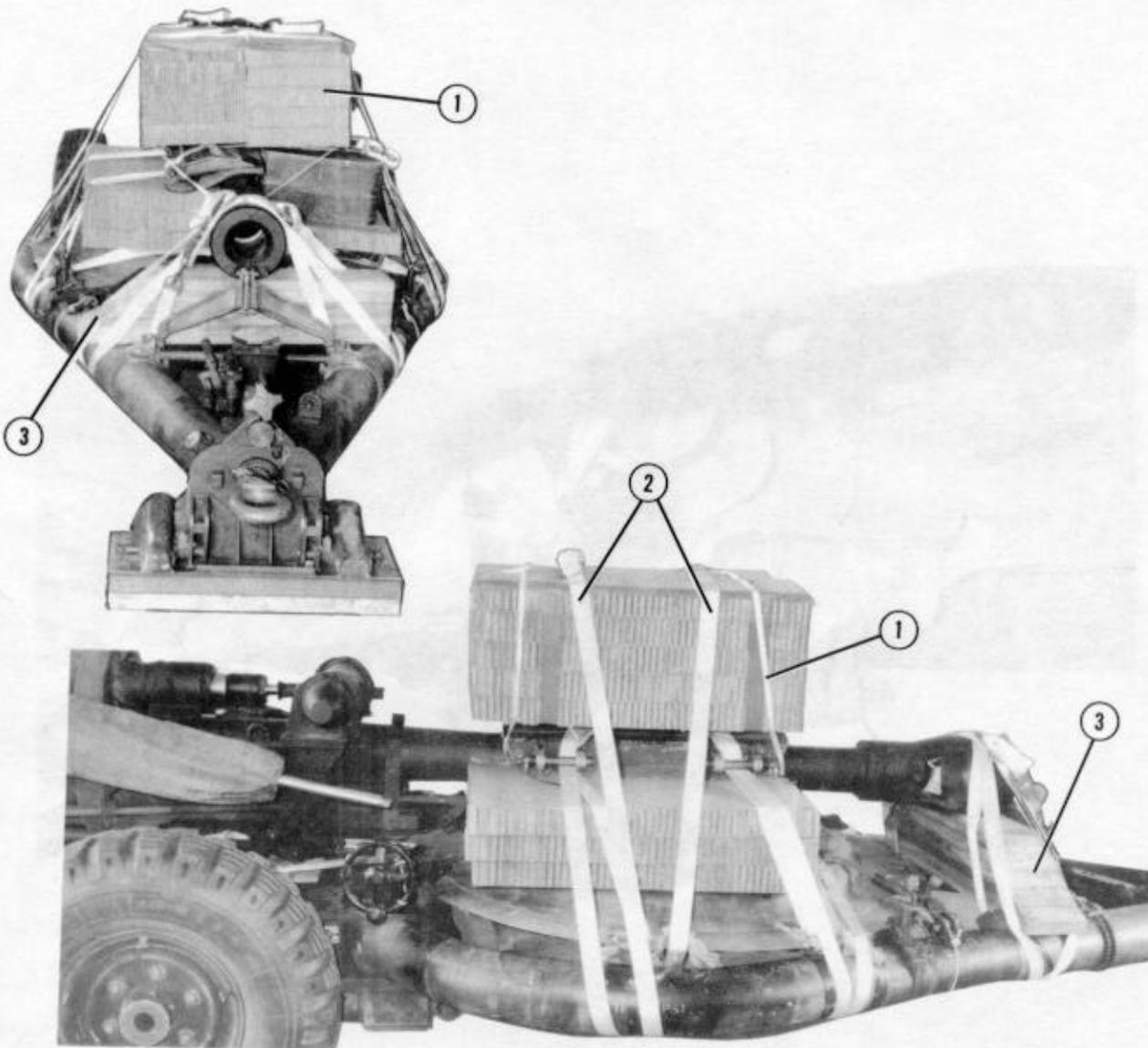
- ③ Place the breech operating handle support over the rails as shown with the upright piece under the operating handle. Place the breech in the down position with the handle resting on the support.
- ④ Pass a 15-foot lashing over the operating handle, around the ends of the wood support, and around the rails. Secure the lashing under and between the rails.
- ⑤ Pass a 15-foot lashing around the breech block assembly and under the operating handle. Pad the lashing around the bottom of the breech, the sides of the rails and the right side of the breech with a 43- by 3-inch piece of 1/2-inch felt. Secure the lashing on the right.
- ⑥ Safety the lashing installed in step 5 in place with a length of type III nylon cord. Pass the cord around the lashing on the left, cross the cord under the lashing and pass both free ends around the bottom part of the breech assembly. Cross the ends of the cord under the lashing on the right and tie it over the lashing.

Figure 8-8. Both howitzers prepared (continued)



- 1 Install a medium suspension clevis onto each of the brackets on the underside of the gun carriage.

Figure 8-9. Front howitzer prepared



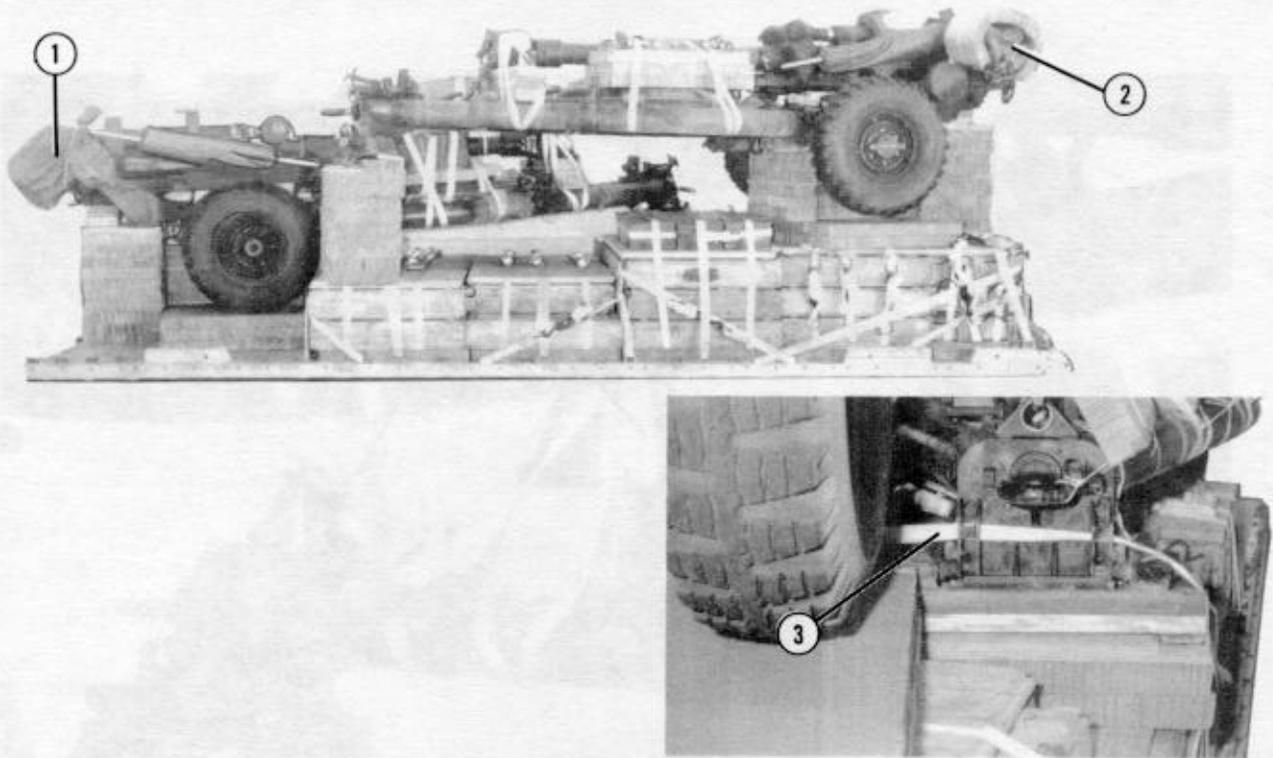
- ① Tie the collimator boxes for both howitzers together, or make a 36- by 36-inch box for two collimators, and secure to the gun tube with 1/2-inch tubular nylon webbing.
- ② Pass a 30-foot lashing over the collimator and around both trails. Secure the lashing on the top.
- ③ Bevel the left side of the muzzle support block 45 degrees.

Figure 8-10. Rear howitzer prepared

8-7. Placing Howitzers on Honeycomb Stacks, Lashing Howitzers, and Installing Protective Honeycomb

Place the howitzers on the platform as shown in Figure 8-11. Lash the howitzers together

and install protective honeycomb as shown in Figure 8-12.



- ① Position the rear howitzer on stacks 4, 5, and 6. The breech assembly must overhang the rear edge of the platform 17 inches.
- ② Position the front howitzer on stacks 1, 2, and 3. The breech assembly must overhang the front edge of the platform 17 inches.

Notes: 1. Do not allow the howitzers to overhang either side of the platform.
 2. Fuzes packed in 21 metal ammunition boxes can be rigged at this time. Place them on the third ammunition stack and secure them with the binding lashings. Lash the boxes together horizontally.

- ③ Unfasten the rear binding lashing on the third stack of boxes and pass it through the holes in the spade assembly of the rear howitzer. Secure the lashing on top of the plywood decking or fuze boxes, if rigged on this load.

Figure 8-11. Howitzers placed on honeycomb stacks

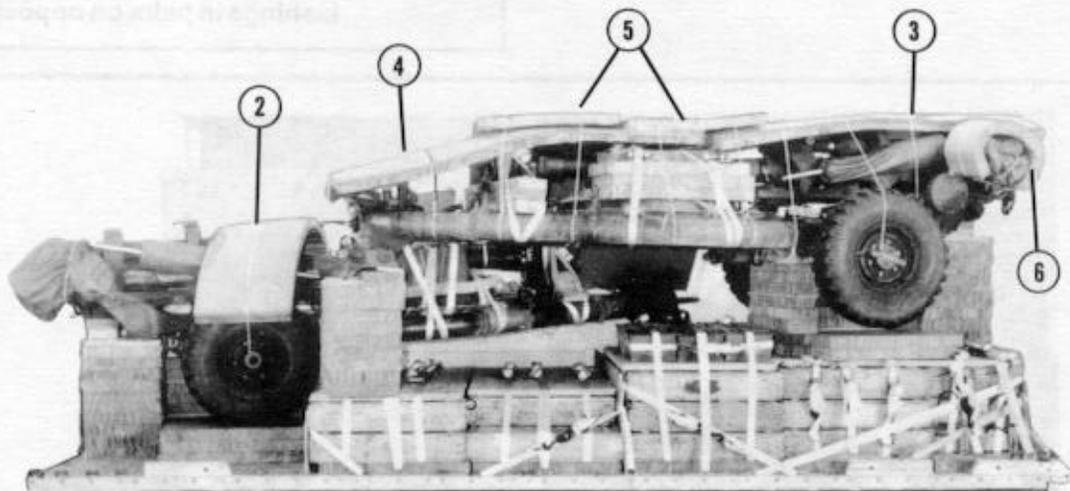


Figure 8-12. Howitzers lashed together and protective honeycomb installed

1. Do not show the howitzers as shown in Figure 8-12. Lash the howitzers together as shown in Figure 8-12. Lash the howitzers together as shown in Figure 8-12. Lash the howitzers together as shown in Figure 8-12.

- ① Lash the inside trails of the howitzers together as shown with two 15-foot lashings.

Figure 8-12. Howitzers lashed together and protective honeycomb installed



- ② Bend a 24- by 96-inch piece of honeycomb over the rear howitzer cylinders. Tie the honeycomb in place with a length of type III nylon cord tied to the wheel hubs.
- ③ Place a 24- by 96-inch piece of honeycomb lengthwise over the front howitzer. Tape the sides of the honeycomb and tie it to convenient points on the howitzer with type III nylon cord.
- ④ Bend a 36- by 96-inch piece of honeycomb lengthwise over the gun tube and spade assembly of the front howitzer. Tape the sides of the honeycomb and tie it to the howitzer with type III nylon cord.
- ⑤ Tie two 96- by 36-inch pieces of honeycomb to the left side of the load, covering the gun tube of the rear howitzer and the trail of the front howitzer. Tie the honeycomb to the howitzer trails with type III nylon cord.
- ⑥ Bend a piece of honeycomb cut to fit over the sight assembly of the front howitzer. Tie it in place with type III nylon cord.

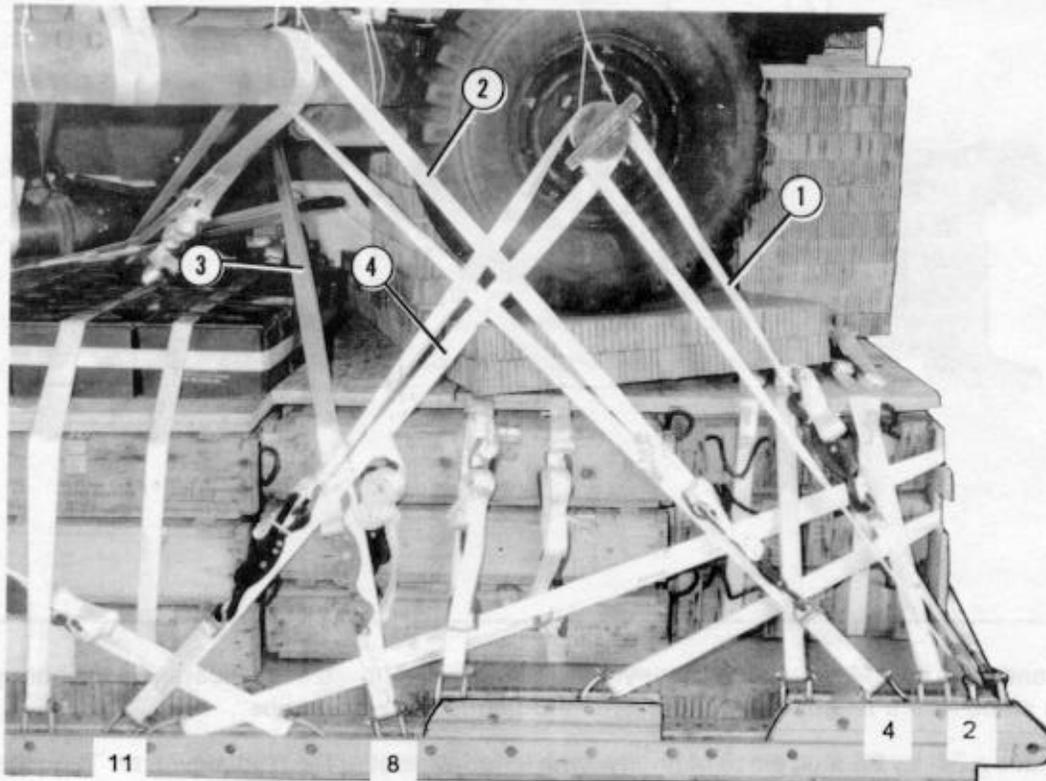
Figure 8-12. Howitzers lashed together and protective honeycomb installed (continued)

8-8. Lashing Howitzers

Lash the howitzers to the right side of the platform as shown in Figure 8-13. Lash the howitzers to the left side of the platform as shown in Figure 8-14.

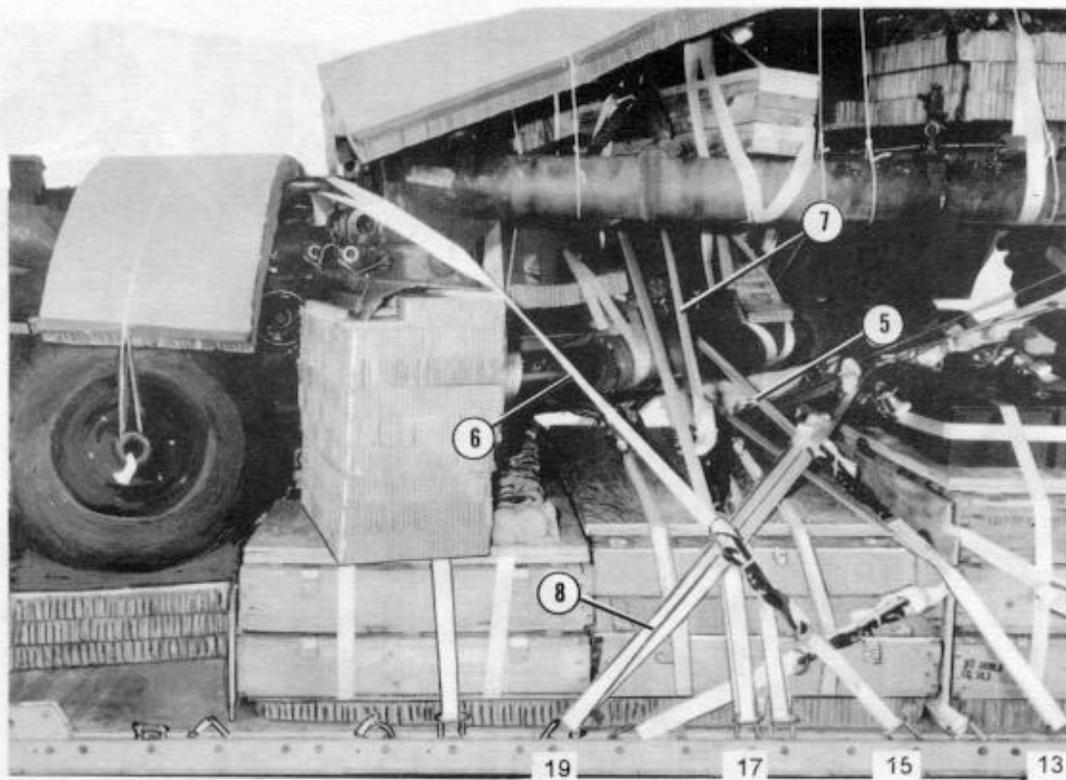
Notes:

1. Lashing numbering for the right side begins with 1. The sequence is repeated for the left side.
2. Do not tighten the lashings until all are installed. Tighten the lashings in pairs on opposite sides.



Lashing Number	Tie-Down Clevis Number	Instructions
1	2	Pass lashing: Around wheel hub.
2	4	Around trail, near side.
3	8	Through medium clevis installed under front howitzer, far side.
4	11	Around wheel hub.

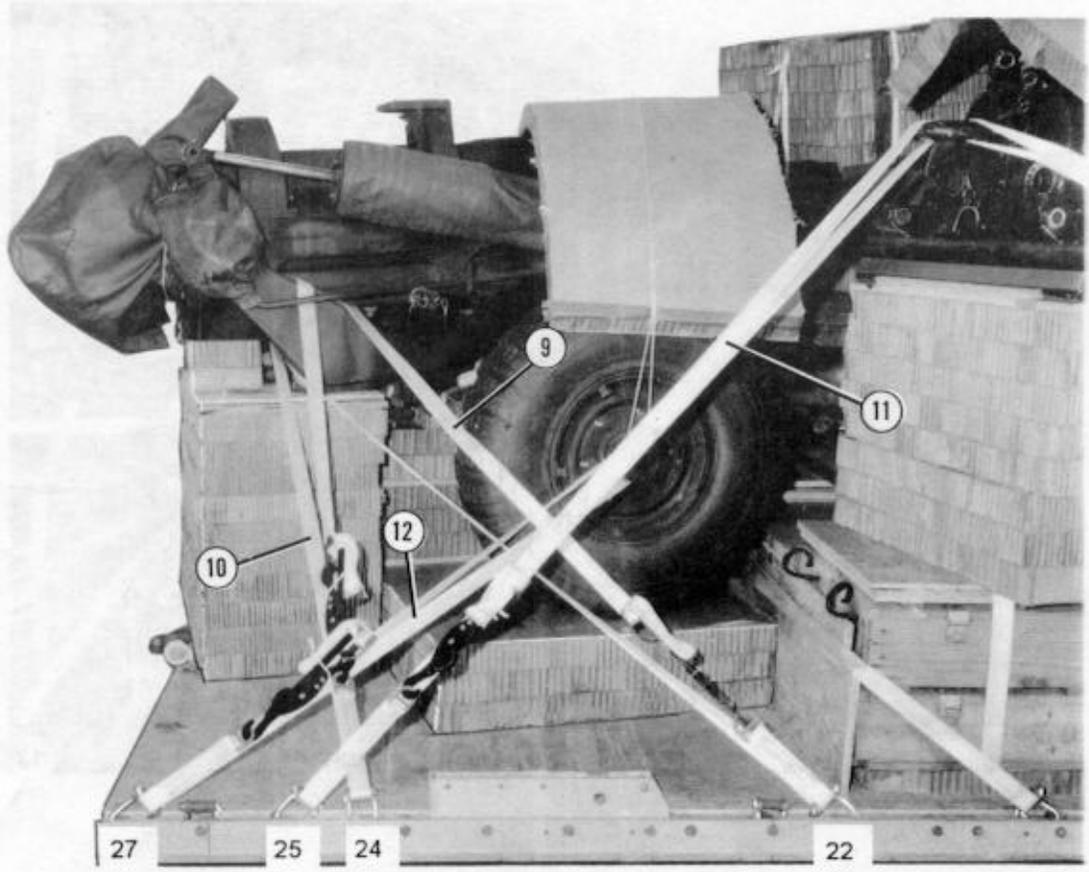
Figure 8-13. Lashings on right side installed



Lashing Number	Tie-Down Clevis Number	Instructions
5	13	Pass lashing: Around trail of rear howitzer, near side, and through cutout of endboard.
6	15	Through lunette on front howitzer.
7	17	Around trail on far side of front howitzer.
* 8	19	Through lunette on rear howitzer.

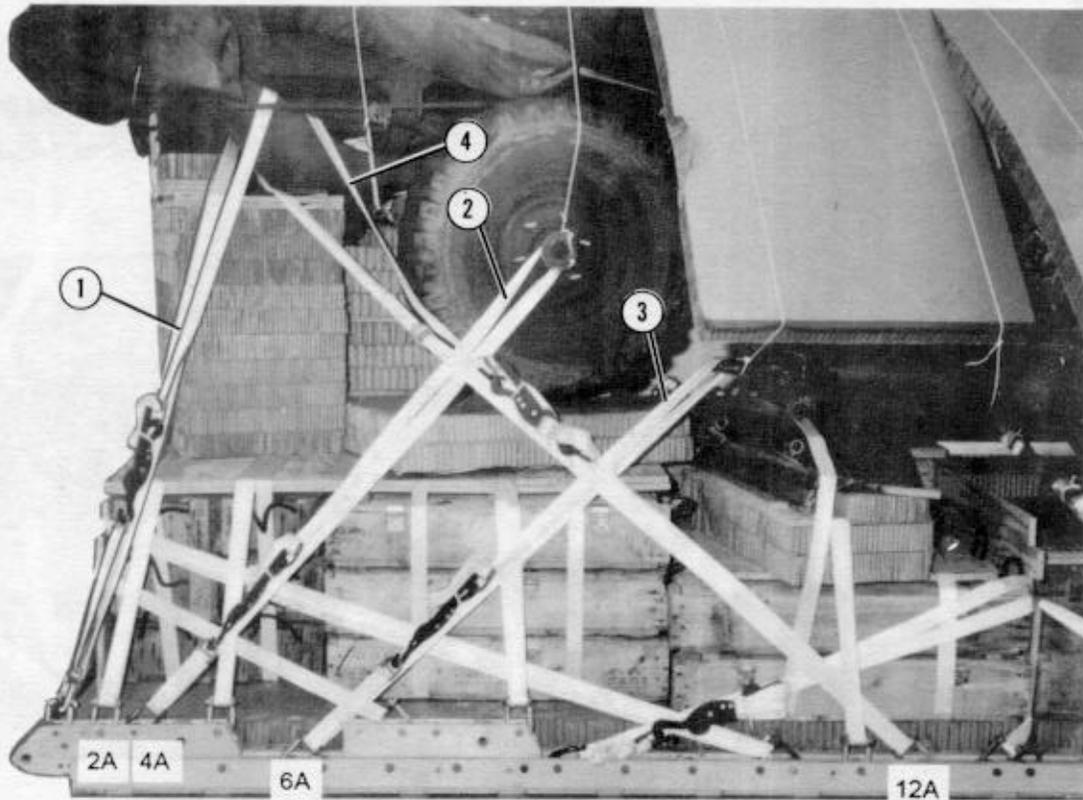
* 30-foot lashings.

Figure 8-13. Lashings on right side installed (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
9	22	Pass lashing: Around saddle of rear howitzer.
10	24	Around saddle of rear howitzer.
11	25	Through lunette, front howitzer.
12	27	Around wheel hub, rear howitzer.

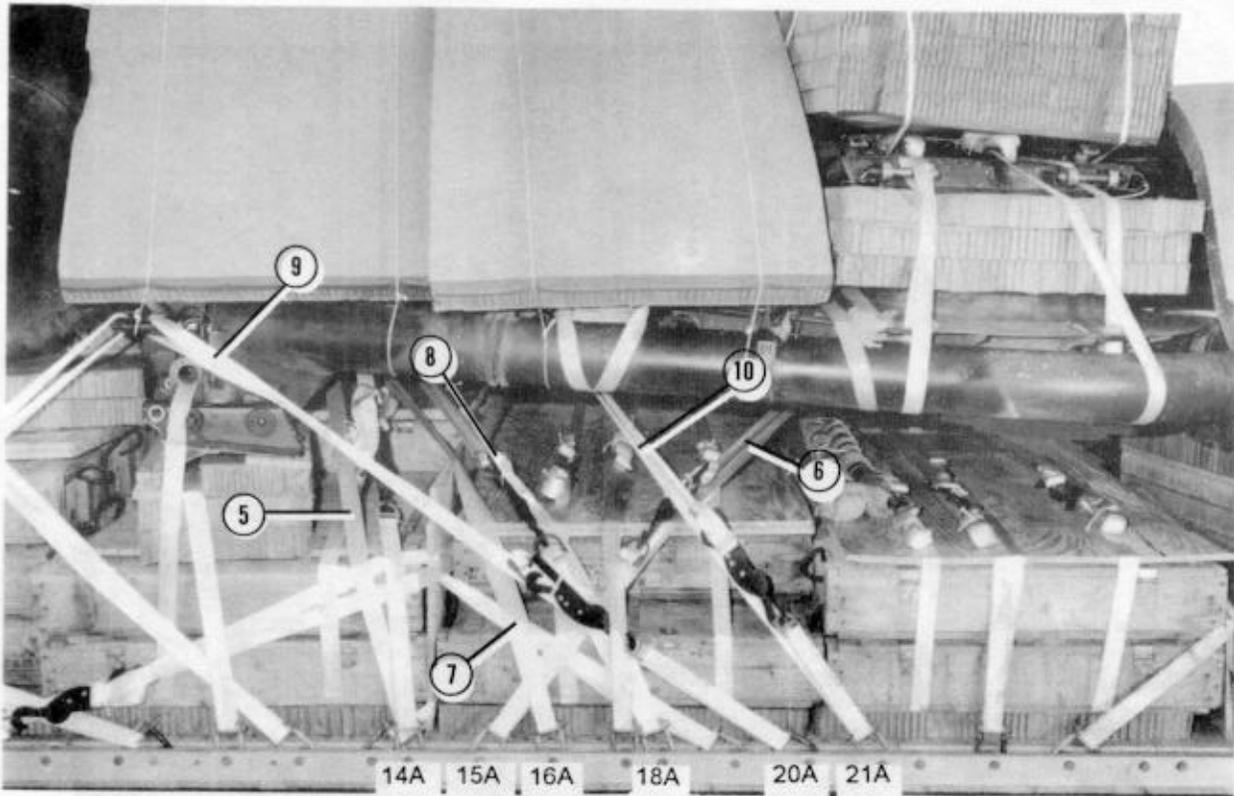
Figure 8-13. Lashings on right side installed (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
1	2A	Pass lashing: Around saddle of front howitzer.
2	4A	Around wheel hub of front howitzer.
3	6A	Through lunette of rear howitzer.
* 4	12A	Around saddle of front howitzer.

* 30-foot lashings.

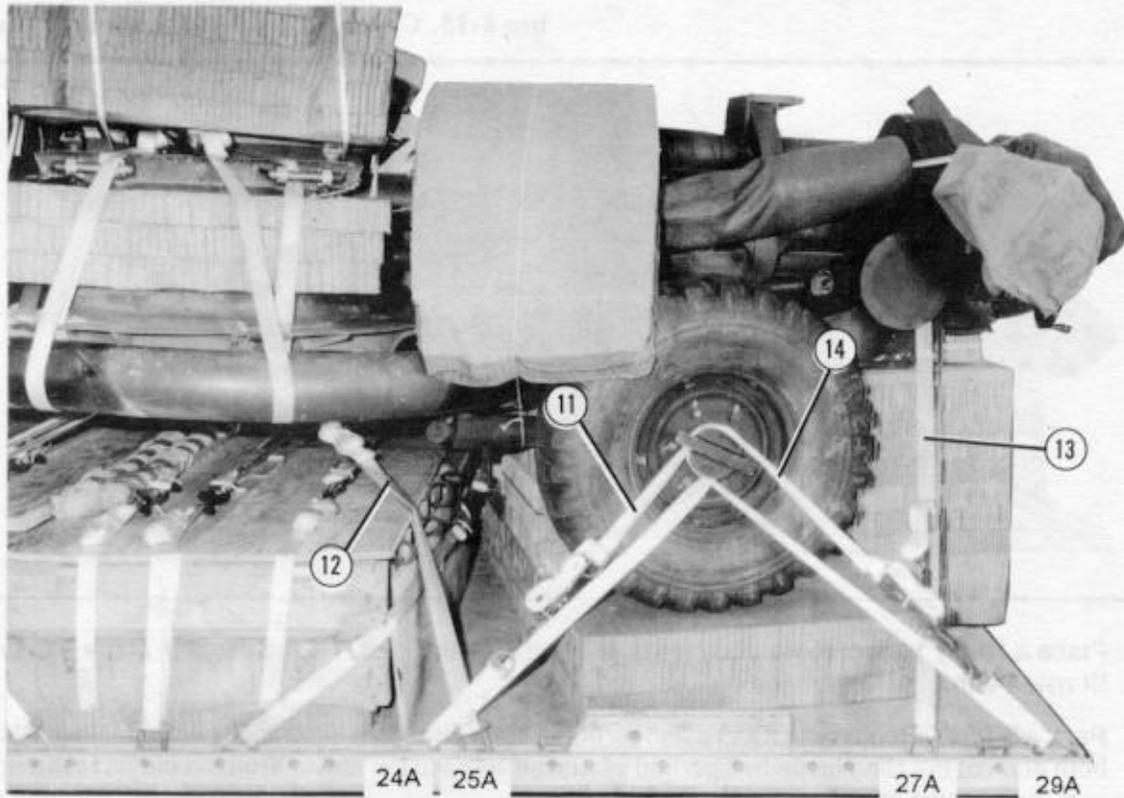
Figure 8-14. Lashings on left side installed



Lashing Number	Tie-Down Clevis Number	Instructions
5	14A	Pass lashing: Around trail on far side of rear howitzer.
* 6	15A	Around trail and up through hole in firing platform, rear howitzer.
* 7	16A	Through medium clevis installed under front howitzer, near side.
* 8	18A	Around trail on far side of front howitzer.
9	20A	Through lunette, rear howitzer.
10	21A	Around trail on far side of rear howitzer.

* 30-foot lashings.

Figure 8-14. Lashings on left side installed (continued)



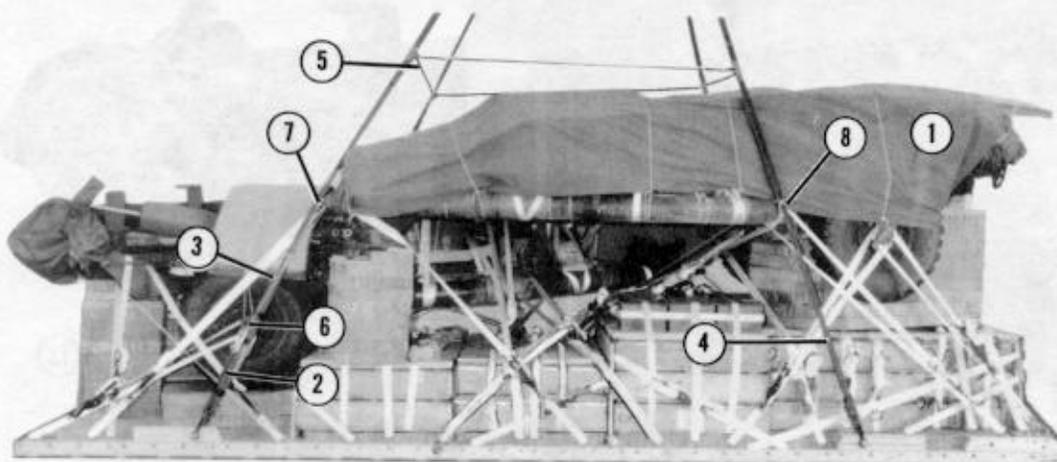
Lashing Number	Tie-Down Clevis Number	Instructions
11	24A	Pass lashing: Around wheel hub.
* 12	25A	Around trail on far side of rear howitzer.
13	27A	Around saddle, and under elevating wheel shaft.
14	29A	Around wheel hub.

* 30-foot lashings.

Figure 8-14. Lashings on left side installed (continued)

8-9. Installing Suspension Slings and Covering Load

Install the suspension slings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 8-15. Cover the load as shown in Figure 8-15.



- ① Place a 10- by 16-foot piece of cotton duck cloth over the load. Tie the cover in place with type III nylon cord.
- ② Pass a 3-foot (4-loop) type XXVI nylon webbing sling through a 5 1/2-inch two-point link. Place both ends of the sling in the bell portion of a large suspension clevis. Bolt the clevis to the right rear suspension link. Repeat for the left side.
- ③ Attach a 16-foot (4-loop) type XXVI nylon webbing sling to each of the 5 1/2-inch two-point links installed in step 2.
- ④ Attach a 16-foot (4-loop) type XXVI nylon webbing sling to each front suspension link with a large suspension clevis.
- ⑤ Extend the slings and install the deadman's tie 6 to 8 inches above the highest point of the load according to FM 10-500-2/TO 13C7-1-5.
- ⑥ Safety the right rear two-point link to the lunette of the front howitzer with type III nylon cord. Safety the left rear two-point link to the nearest howitzer trail (left side not shown).
- ⑦ Safety the right rear sling to the lunette of the front howitzer at a point where the sling passes the lunette. Use type III nylon cord.
- ⑧ Safety the right front suspension sling to the nearest howitzer trail with type III nylon cord. Safety the left front suspension sling to the wheel hub of the front howitzer (left side not shown).

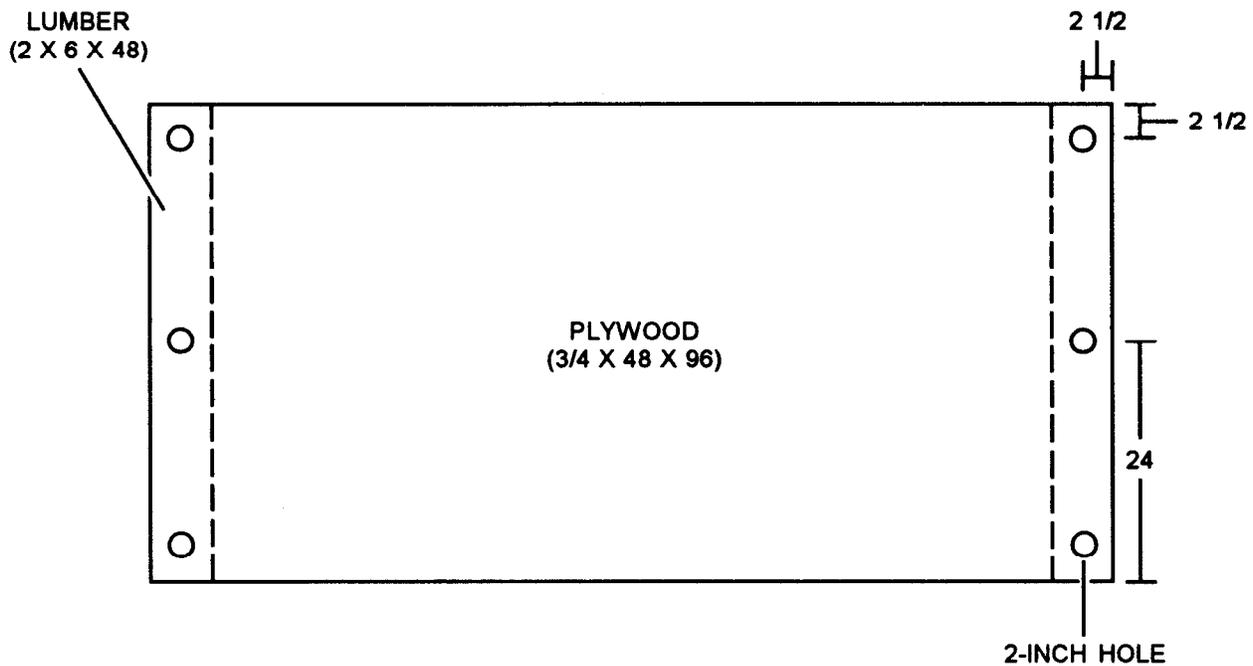
Figure 8-15. Suspension slings and load cover installed

8-10. Preparing Storage Platform and Stowing Cargo Parachutes

Prepare the parachute stowage platform as shown in Figure 8-16. Prepare the left parachute stowage platform support as shown in Figure 8-17. Prepare the right parachute stowage platform support as shown in Figure 8-18. Assemble the

stowage platform as shown in Figure 8-19. Stow five G-11B cargo parachutes according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 8-20.

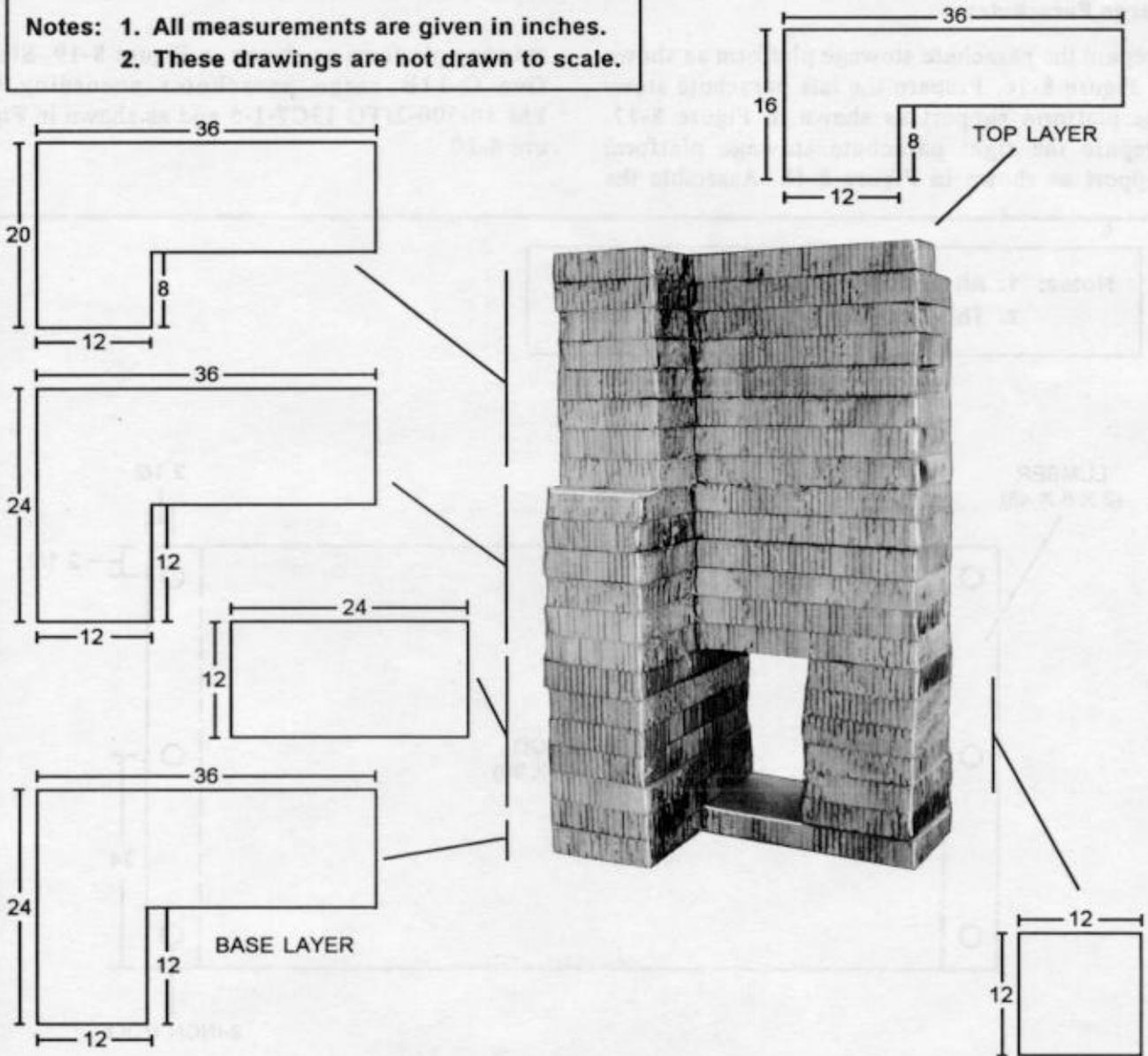
- Notes:** 1. All measurements are given in inches.
2. This drawing is not drawn to scale.



- ① Prepare the parachute stowage platform as shown.
- ② Tie the lumber to the plywood through each of the holes with a length of type III nylon cord.

Figure 8-16. Parachute stowage platform prepared

Notes: 1. All measurements are given in inches.
 2. These drawings are not drawn to scale.



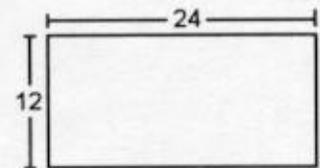
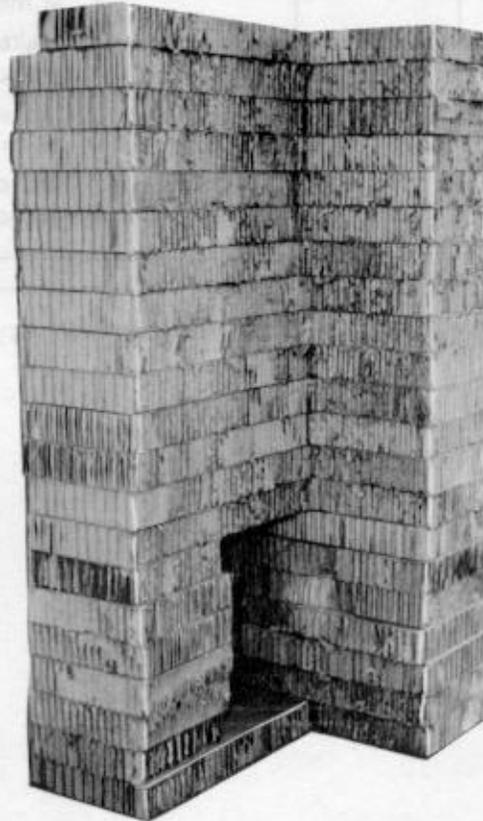
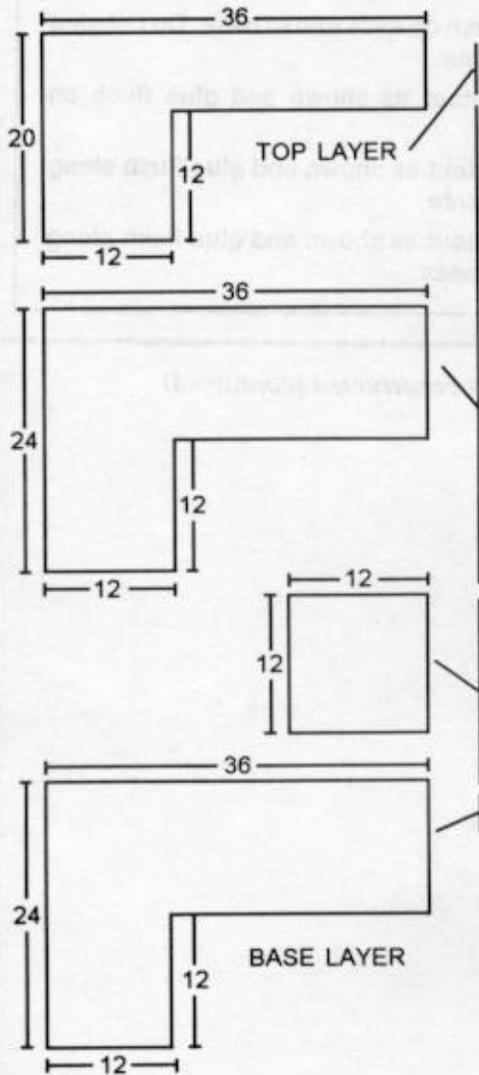
Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	24	36	Honeycomb	Make cutout on base as shown.
6	12	12	Honeycomb	Place flush on narrow end of base. Do not glue at this time.

Figure 8-17. Left parachute stowage platform support constructed

Pieces	Width (Inches)	Length (Inches)	Material	Instructions
6	24	12	Honeycomb	Place flush on wide end of base. Do not glue at this time.
6	24	36	Honeycomb	Make cutout as shown and glue flush on stack.
7	20	36	Honeycomb	Make cutout as shown and glue flush along 36-inch side.
1	16	36	Honeycomb	Make cutout as shown and glue flush along angled sides.

Figure 8-17. Left parachute stowage platform support constructed (continued)

Notes: 1. All measurements are given in inches.
2. These drawings are not drawn to scale.

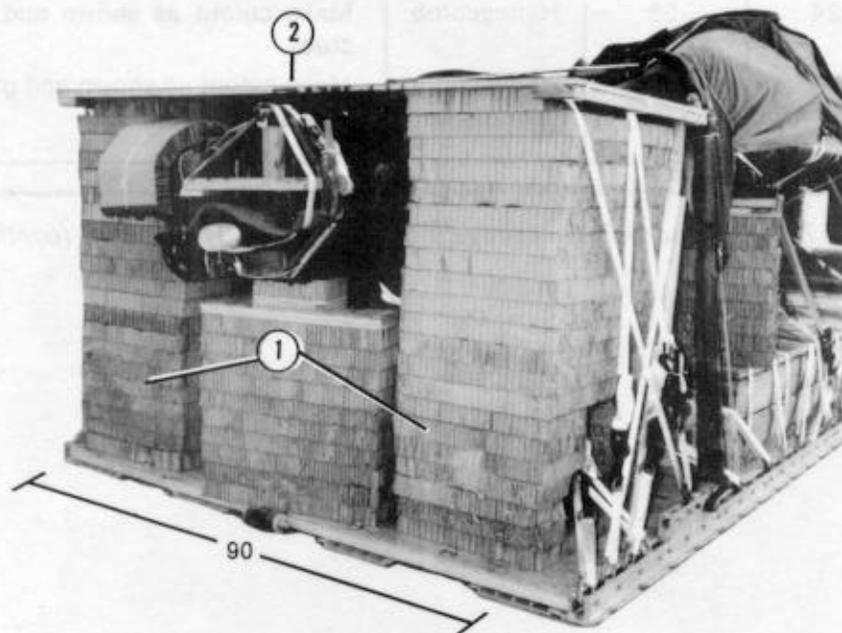


Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	24	36	Honeycomb	Make cutout on base as shown.
6	12	12	Honeycomb	Place flush on narrow end of base. Do not glue at this time.

Figure 8-18. Right parachute stowage platform support constructed

Pieces	Width (Inches)	Length (Inches)	Material	Instructions
6	24	12	Honeycomb	Place flush on wide end of base. Do not glue at this time.
13	24	36	Honeycomb	Make cutout as shown and glue flush on stack.
1	20	36	Honeycomb	Make cutout as shown and glue flush along angled sides.

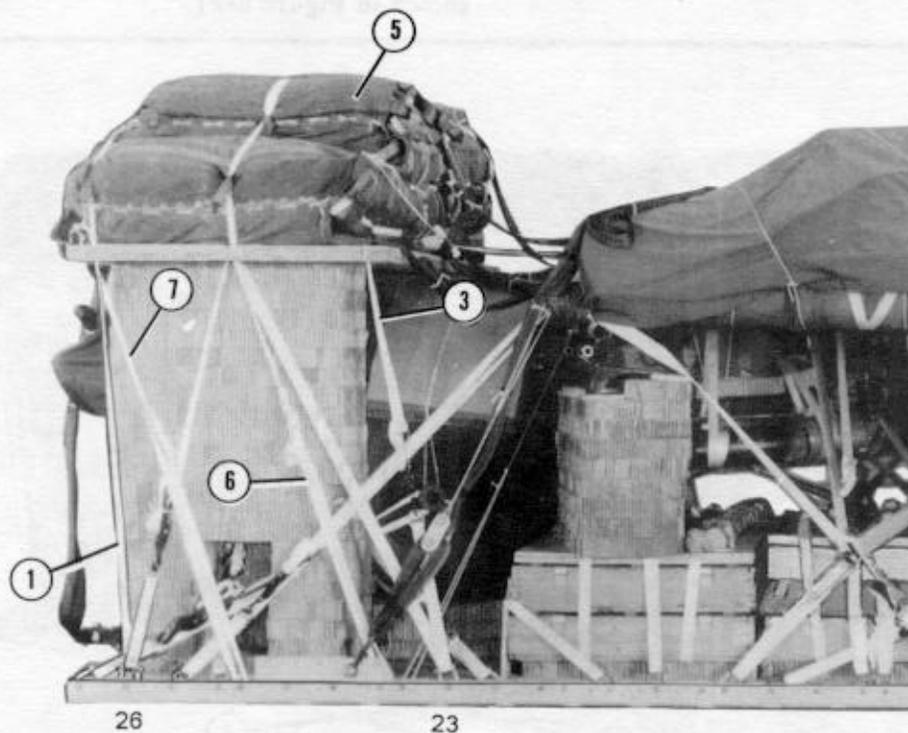
Figure 8-18. Right parachute stowage platform support constructed (continued)



- ① Place the base layers of the left and right parachute stowage platform supports with the wide ends to the rear, 4 inches from the rear edge of the platform and 90 inches apart. Glue the upper layers of the supports to the bases.
- ② Fit the parachute stowage platform to the honeycomb supports.

Note: At this time trim the supports and stack 5 as necessary to allow for the lashings and for firm support of the parachute stowage platform. The supports may be moved as necessary.

Figure 8-19. Parachute stowage platform assembled and placed

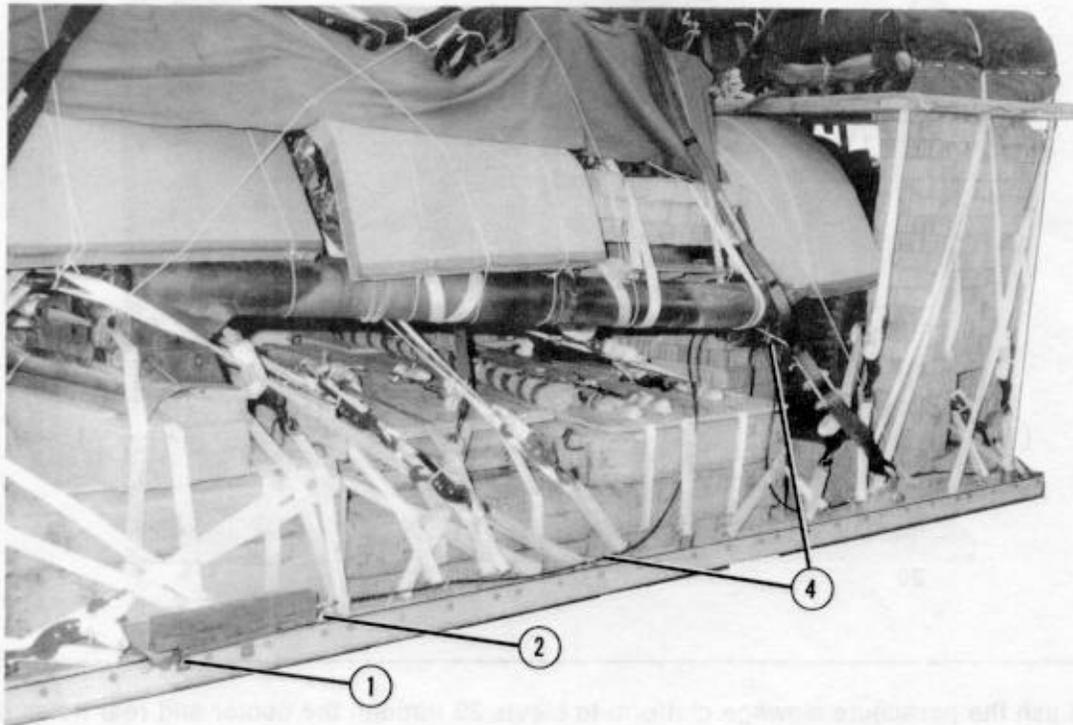


- ① Lash the parachute stowage platform to clevis 26 through the center and rear holes on the right side.
- ② Lash the parachute stowage platform to clevis 28A through the center and rear holes on the left side (not shown).
- ③ Lash the parachute stowage platform to clevis 23 through the center and front holes on the right side.
- ④ Lash the parachute stowage platform to clevis 26A through the center and front holes on the left side (not shown).
- ⑤ Prepare and install five G-11B cargo parachutes.
- ⑥ Tie the front parachute restraint strap to the first bushing on each rear suspension link.
- ⑦ Tie the rear parachute restraint strap to the first bushing after the suspension link on each rail.

Figure 8-20. Cargo parachutes stowed

8-11. Installing Extraction System

Install the EFTC extraction system on the load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 8-21.

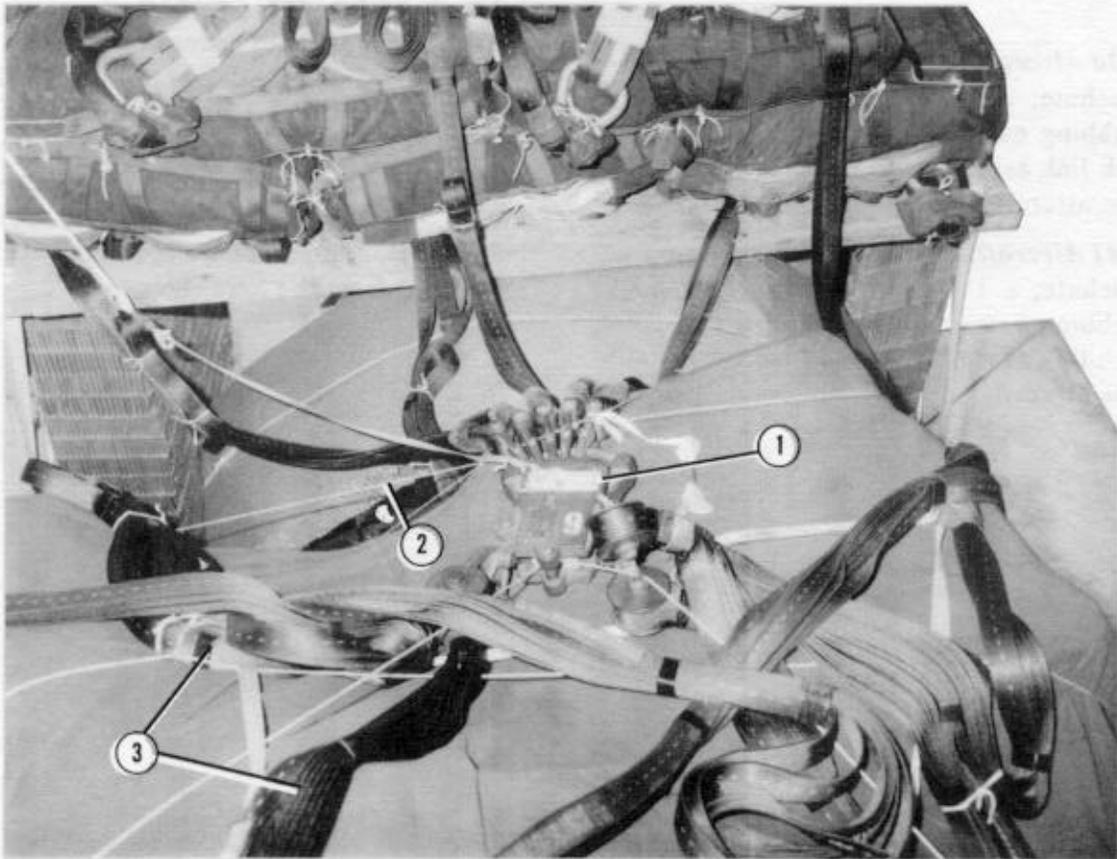


- ① Install the EFTC mounting brackets to the rear set of holes on the left platform side rail.
- ② Install the actuator according to FM 10-500-2/TO 13C7-1-5.
- ③ Install the latch assembly and latch assembly adapter to the extraction bracket according to FM 10-500-2/TO 13C7-1-5 (not shown).
- ④ Install a 20-foot cable according to FM 10-500-2/TO 13C7-1-5. Safety the cable to convenient points with type I, 1/4-inch cotton webbing.
- ⑤ Install a 12-foot (2-loop), type XXVI nylon webbing deployment line. S-fold the slack and tie the folds with type I, 1/4-inch cotton webbing (not shown).

Figure 8-21. EFTC installed

8-12. Installing Release System

Prepare and install an M-2 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 8-22.



- ① Center the M-2 release on the honeycomb in front of the parachutes.
- ② Secure the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie slack in the suspension slings with type I, 1/4-inch cotton webbing.

Figure 8-22. M-2 release installed

8-13. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints on the front of the platform according to FM 10-500-2/TO 13C7-1-5.

8-14. Placing Extraction Parachutes

Place the extraction parachutes as described below.

a. C-130 Aircraft. Place a 28-foot cargo extraction parachute; a 60-foot (3-loop), type XXVI nylon webbing extraction line; and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft.

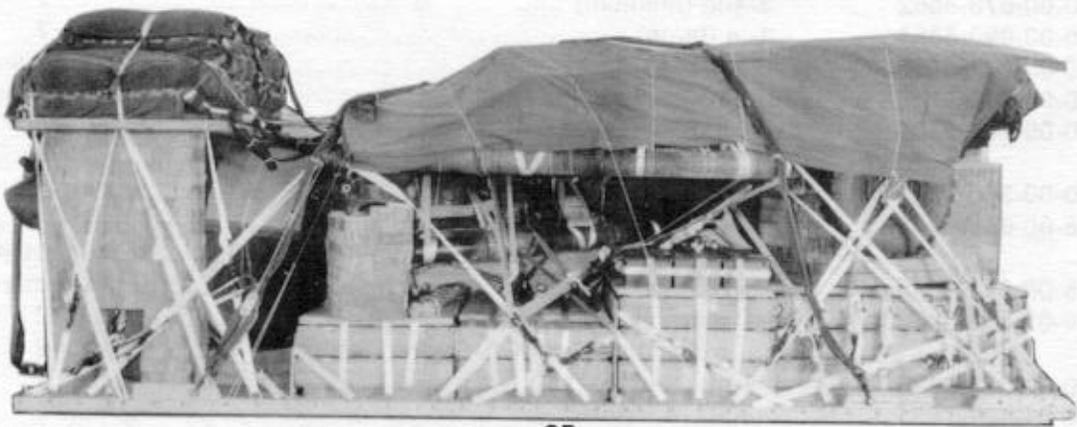
b. C-141 Aircraft. Place a 28-foot cargo extraction parachute; a 140-foot (3-loop), type XXVI nylon webbing extraction line; and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft.

c. C-5 Aircraft. Place a 28-foot cargo extraction parachute and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

8-15. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 8-23. 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 AFJMAN 24-240. Use FM 10-500-2/TO 13C7-1-5 to compute the weight, height, CB, and parachute requirements for loads that differ from the load shown.

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



CB

RIGGED LOAD DATA

Weight: Minimum load allowed	22,660 pounds
Maximum load allowed	24,000 pounds
Height	98 inches
Width	108 inches
Length	274 inches
Overhang: Front	17 inches
Rear	17 inches
CB (from front edge of platform)	110 inches
Extraction System	EFTC

Figure 8-23. Two M119 howitzers rigged for low-velocity airdrop on a type V platform

8-16. Equipment Required

Use the equipment listed in Table 8-1 to rig the load shown.

Table 8-1. Equipment required for rigging two M119 howitzers for low-velocity airdrop on a type V platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
	Clevis, suspension:	
4030-00-678-8562	3/4-in (medium)	2
4030-00-090-5354	1-in (large)	7
8305-00-242-3593	Cloth, cotton duck	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5787	Coupling, airdrop, extraction force transfer w 20-ft cable	1
1670-00-360-0329	Cover, link assembly (type IV)	20
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-958-3685	Felt, 1/2-inch thick	As required
1670-01-183-2678	Leaf, extraction line	2
	Line, extraction, type XXVI nylon webbing:	2
1670-01-062-6313	60-ft (3-loop) <u>or</u>	1
1670-01-107-7651	140-ft (3-loop)	1
	Link assembly:	
	Two-point, 3 3/4-in:	1
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(2)
5310-00-232-5165	Nut, 1-in, hexagonal	(2)
1670-00-003-1953	Plate, side, 3 3/4-in	(2)
5365-00-007-3414	Spacer, large	(2)
	Two-point, 5 1/2-in:	2
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(4)
5310-00-232-5165	Nut, 1-in	(4)
1670-00-003-1954	Plate, side, 5 1/2-in	(4)
5365-00-007-3414	Spacer, large	(4)
1670-00-783-5988	Type IV	20
	Lumber:	
5510-00-220-6146	2- by 4-in	As required
5510-00-220-6148	2- by 6-in	As required
5510-00-220-6246	2- by 8-in	As required
	Nail, steel wire, common:	
5315-00-010-4659	8d	As required
5315-00-064-5121	20d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb	
	3- by 36- by 96-in:	31
	12- by 8-in	(2)

Table 8-1. Equipment required for rigging two M119 howitzers for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
	12- by 12-in	(12)
	12- by 24-in	(12)
	15- by 36-in	(10)
	16- by 36-in	(1)
	18- by 36-in	(6)
	20- by 36-in	(9)
	24- by 36-in	(22)
	24- by 38-in	(2)
	25- by 30-in	(2)
	25- by 36-in	(11)
	30- by 10-in	(2)
	30- by 16-in	(11)
	30- by 20-in	(20)
	36- by 96-in	(1)
	72- by 36-in	(5)
	96- by 24-in	(2)
	96- by 26-in	(1)
	96- by 36-in	(6)
	Parachute:	
1670-01-016-7841	Cargo, G-11B	5
1670-00-040-8135	Cargo extraction, 28-ft	1
	Platform, AD, type V, 20-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2372	Clevis assembly	(58)
1670-01-162-2376	Extraction bracket assembly	(1)
1670-00-081-6865	Nose bumper, 104-in	(1)
1670-01-247-2389	Suspension link	(4)
1670-01-162-2381	Tandem link	(2)
5530-00-129-7777	Plywood, 1/2-in:	
	10 1/2- by 6-in	2
	40- by 7 1/2-in	2
5530-00-128-4981	Plywood, 3/4-in:	
	12- by 8-in	3
	21- by 6-in	2
	25- by 36-in	4
	30- by 6-in	4
	30- by 20-in	2
	34- by 30-in	1
	40- by 7 1/2-in	2
	60- by 37-in	2
	74- by 17-in	2

Table 8-1. Equipment required for rigging two M119 howitzers for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
	74- by 36-in.....	2
	74- by 45-in.....	2
	80- by 24-in.....	1
	96- by 15-in.....	1
	96- by 24-in.....	1
	96- by 36-in.....	2
	96- by 48-in.....	1
1670-01-097-8817	Release, cargo parachute, M-2	1
	Sling, cargo, airdrop, type XXVI nylon webbing:	
	For deployment line:	
1670-01-062-6303	12-ft (2-loop).....	1
	For lifting:	
1670-01-063-7760	11-ft (2-loop).....	3
	For riser extension:	
1670-01-062-6302	20-ft (2-loop).....	20
	For suspension:	
1670-01-062-6306	3-ft (4-loop).....	2
1670-01-432-2507	16-ft (4-loop).....	4
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	100
	Webbing:	
8305-00-268-2411	Cotton, 1/4-inch, type I	As required
	Nylon, tubular:	
8305-00-082-5752	1/2-in	As required
8305-00-268-2455	1-in	As required
8305-00-263-3591	Type VIII.....	As required