

POSITIONING AND SECURING JAVELINS ON STACK 1

5-5. Position and secure the Javelins on stack 1 as shown in Figure 5-4.

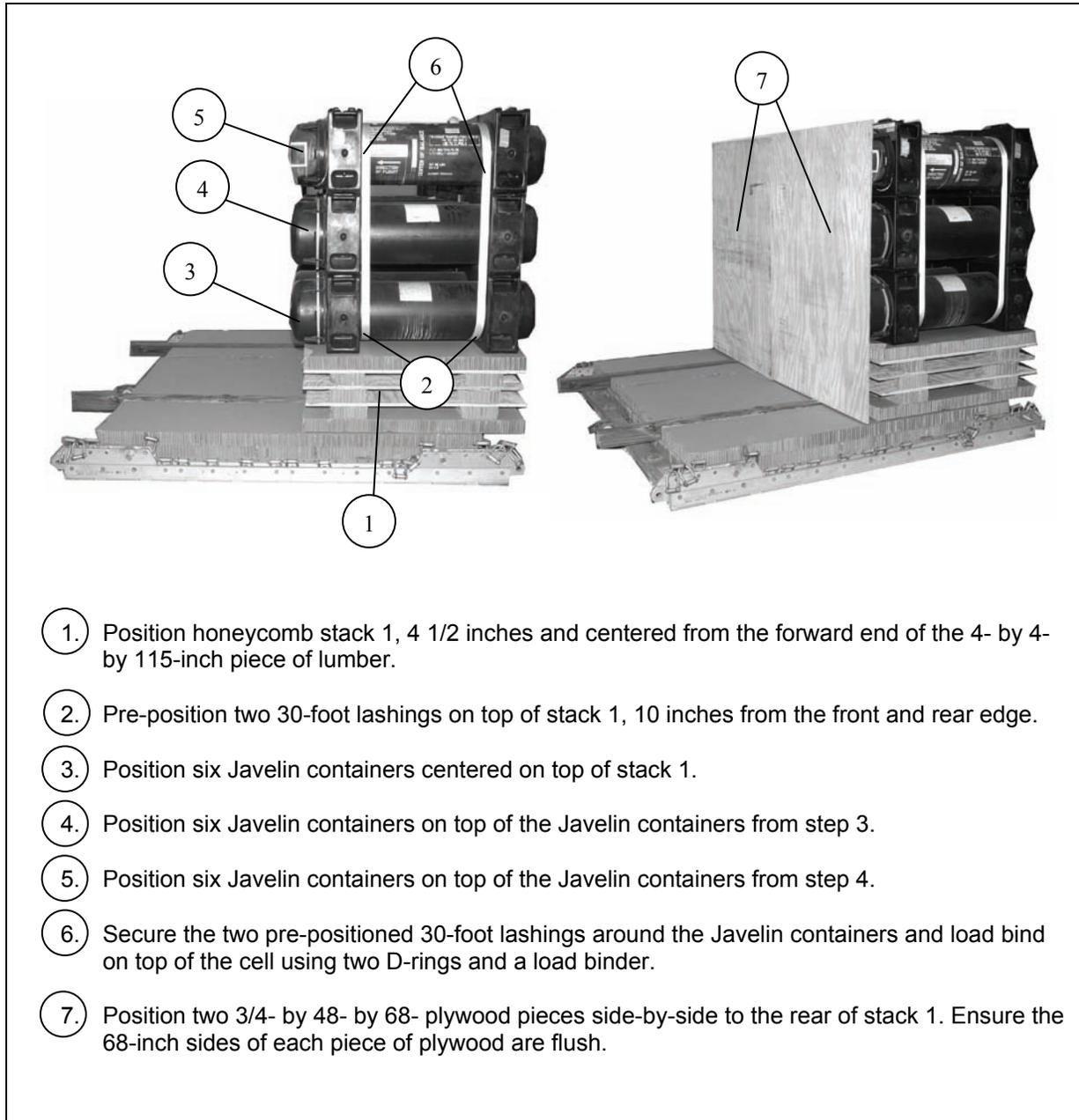


Figure 5-4. Javelins Positioned and Secured on Stack 1

POSITIONING AND SECURING JAVELINS ON STACK 2

5-6. Position and secure the Javelins on stack 2 as shown in Figure 5-5.

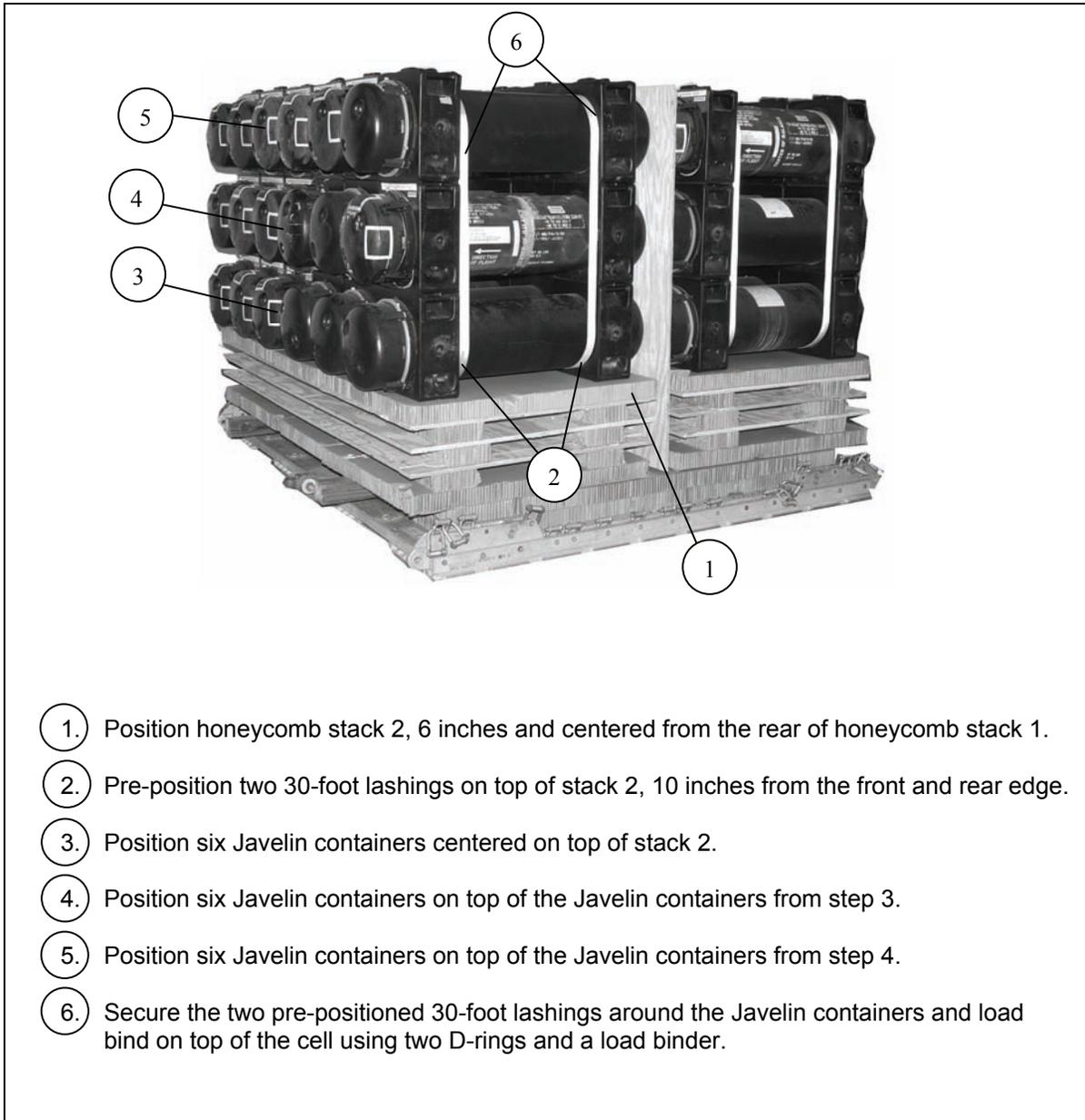
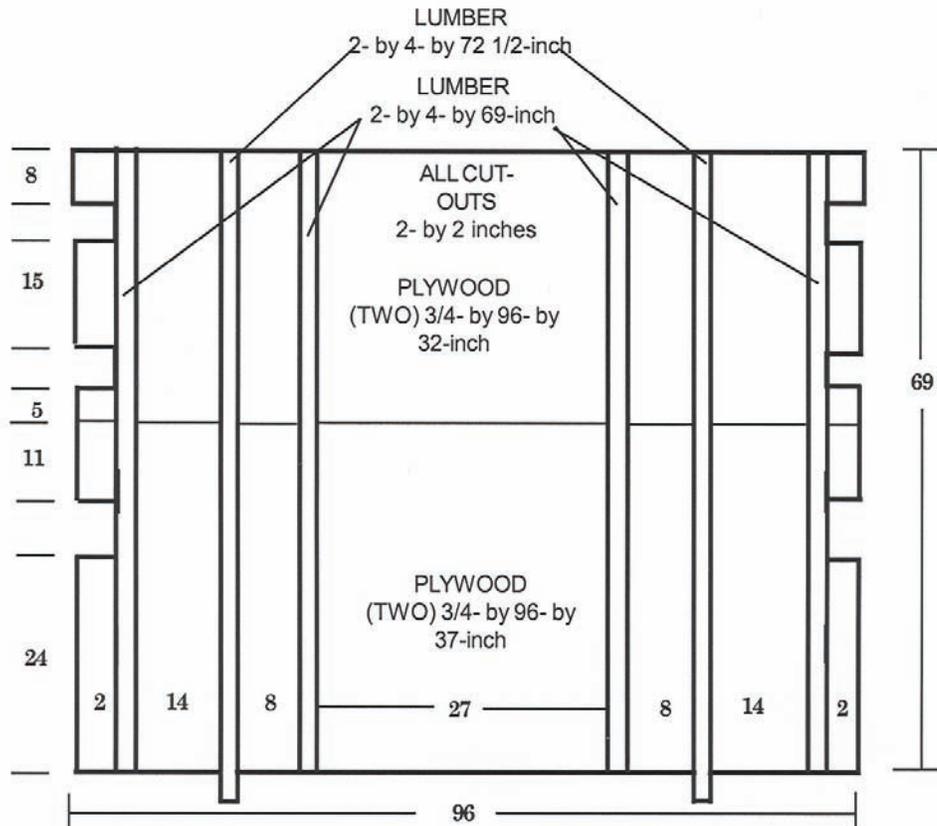


Figure 5-5. Javelins Positioned and Secured on Stack 2

CONSTRUCTING FRONT ENDBOARD

5-7. Construct the front endboard as shown in Figure 5-6.

- Notes.** 1. This drawing is not to scale.
2. All dimensions are in inches.
3. Use 8d nails.



Step:

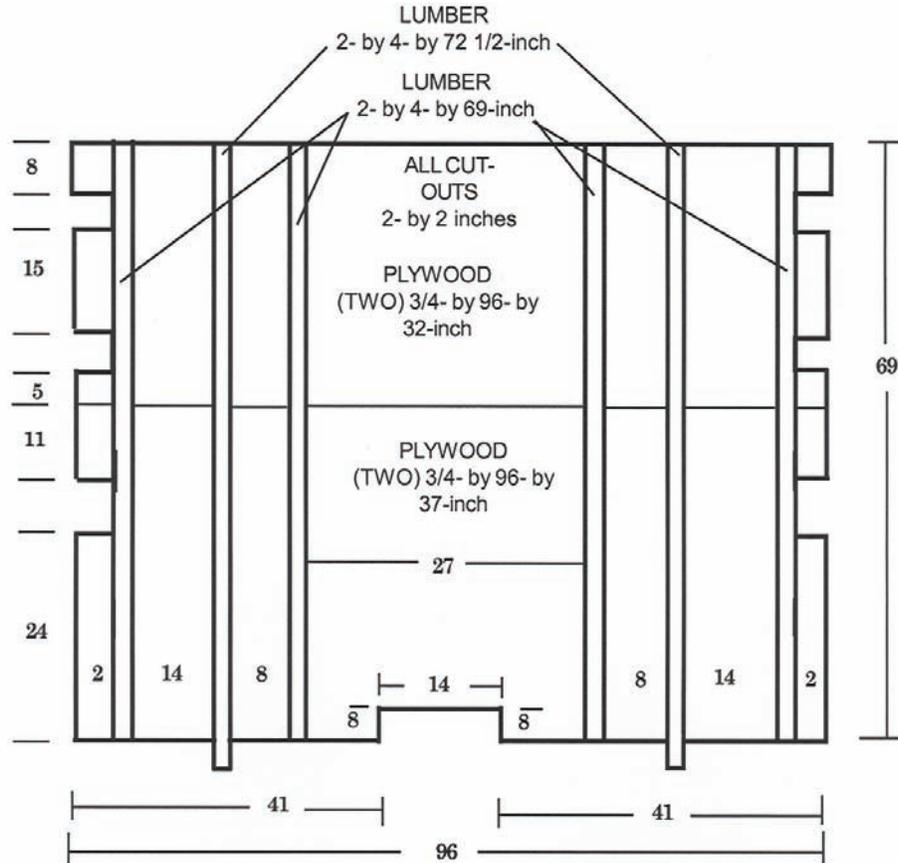
1. Cut two 3/4- by 96- by 32-inch pieces of plywood.
2. Cut two 3/4- by 96- by 37-inch pieces of plywood.
3. Cut six 2- by 2-inch cutouts on each of the four pieces of plywood.
4. Cut four 2- by 4- by 69-inch pieces of lumber.
5. Cut two 2- by 4- by 72 1/2-inch pieces of lumber.
6. Nail two pieces of plywood flush together using the six 2- by 4-inch pieces of lumber with 8d nails as shown above to make an endboard. Repeat this step to make two endboards.

Figure 5-6. Front Endboard Constructed

CONSTRUCTING REAR ENDBOARD

5-8. Construct the front endboard as shown in Figure 5-7.

- Notes.** 1. This drawing is not to scale.
2. All dimensions are in inches.
3. Use 8d nails.



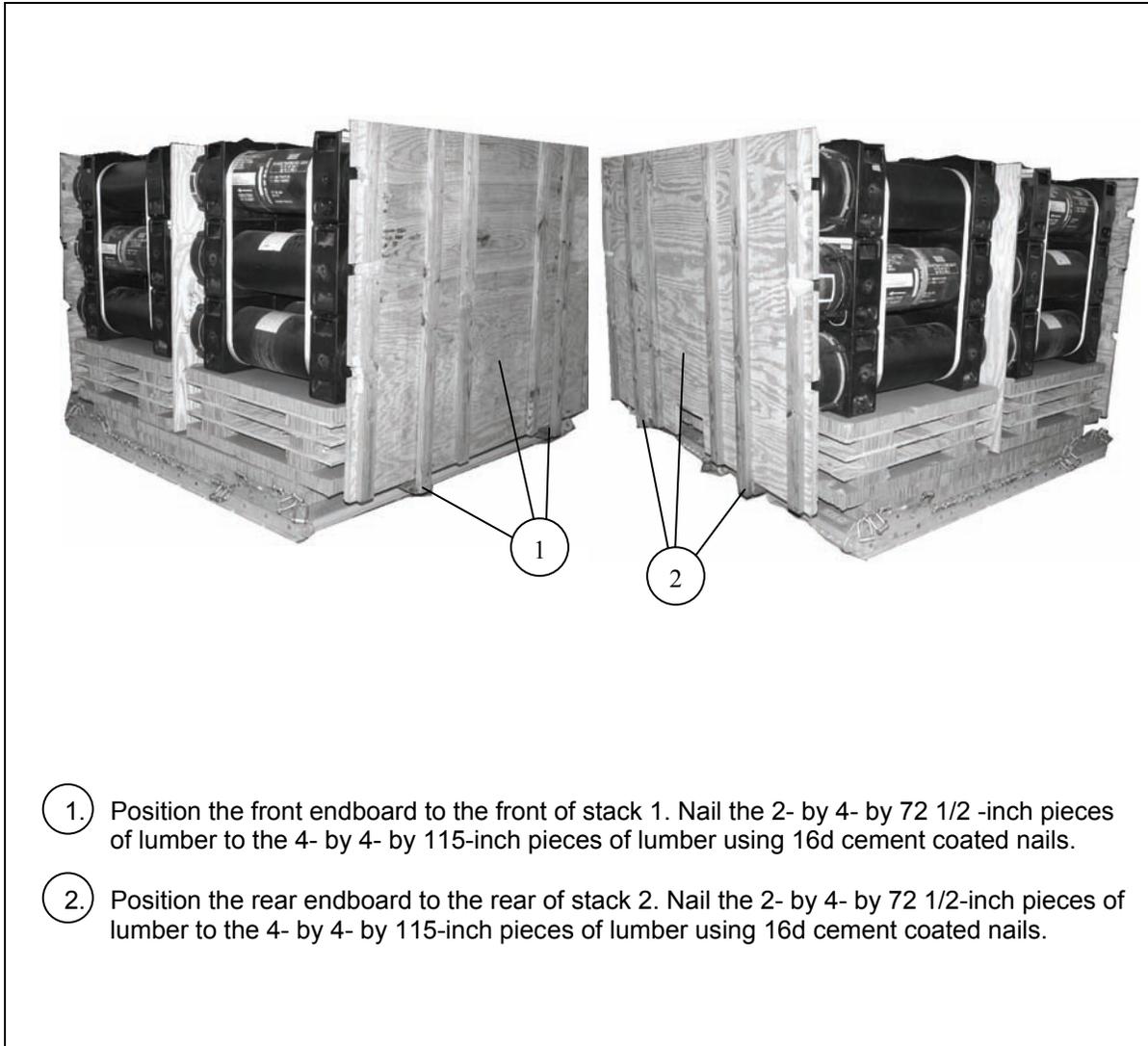
Step:

1. Cut two 3/4- by 96- by 32-inch pieces of plywood.
2. Cut two 3/4- by 96- by 37-inch pieces of plywood.
3. Cut an 8- by 14-inch cutout on the two 3/4- by 96- by 37-inch pieces of plywood.
4. Cut six 2- by 2-inch cutouts on each of the four pieces of plywood.
5. Cut four 2- by 4- by 69-inch pieces of lumber.
6. Cut two 2- by 4- by 72 1/2-inch pieces of lumber.
7. Nail two pieces of plywood flush together using the six 2- by 4-inch pieces of lumber with 8d nails as shown above to make an endboard. Repeat this step to make two endboards.

Figure 5-7. Front Endboard Constructed

POSITIONING FRONT AND REAR ENDBOARDS

5-9. Position the front and rear endboards as shown in Figure 5-8.



1. Position the front endboard to the front of stack 1. Nail the 2- by 4- by 72 1/2 -inch pieces of lumber to the 4- by 4- by 115-inch pieces of lumber using 16d cement coated nails.
2. Position the rear endboard to the rear of stack 2. Nail the 2- by 4- by 72 1/2-inch pieces of lumber to the 4- by 4- by 115-inch pieces of lumber using 16d cement coated nails.

Figure 5-8. Front and Rear Endboard Positioned

FRONT AND REAR ENDBOARDS SECURED WITH LASHING

5-10. Secure the front and rear endboards as shown in Figure 5-9.

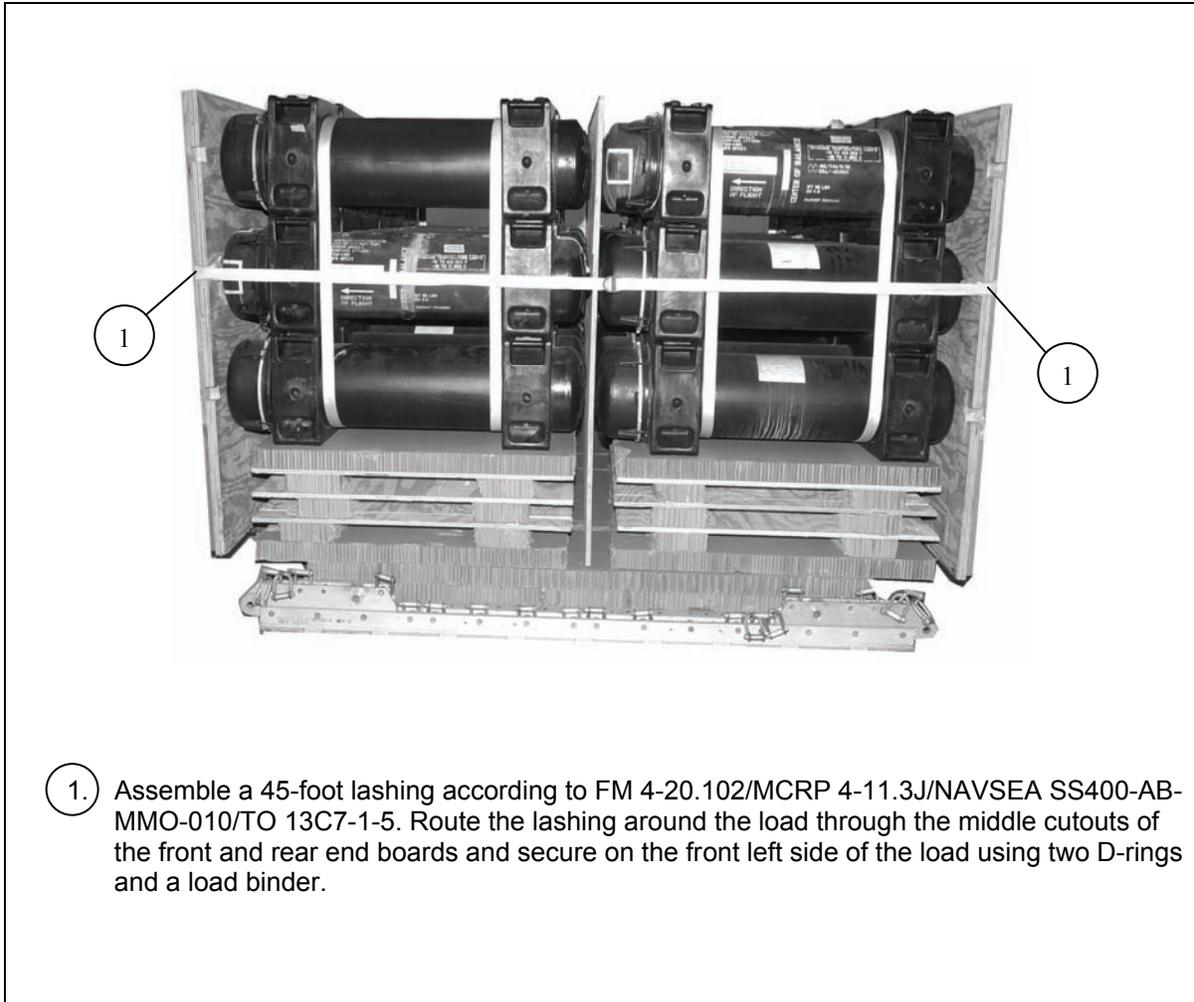


Figure 5-9. Front and Rear Endboards Secured

LASHING LOAD TO PLATFORM

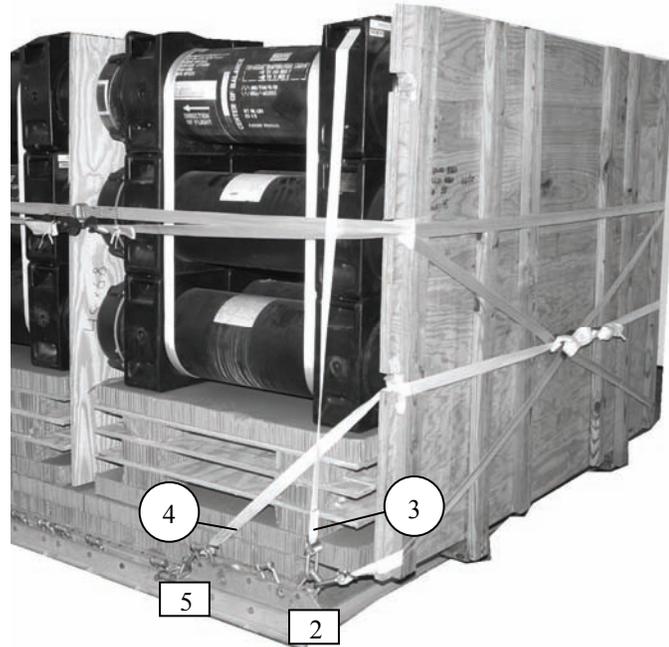
5-11. Lash the load to the platform as shown in Figure 5-10.

Note. Pad all cutouts with cellulose wadding where the lashings make contact.

Lashing Number	Tiedown Clevis Number	Instructions
1	1 and 18	Route a 15-foot lashing through clevis 1 and through its own D-ring. Route a 15-foot lashing through clevis 18 and through its own D-ring. Run the free end from clevis 1 around the right bottom corner of the front endboard to the center left cutout of the front endboard. Run the free end from clevis 18 around the right bottom corner of the rear endboard to the left center cutout of the rear endboard. Secure the free ends to the lashings with two D-rings and a load binder centered on the left side of the load.
2	1A and 18A	Route a 15-foot lashing through clevis 1A and through its own D-ring. Route a 15-foot lashing through clevis 18A and through its own D-ring. Run the free end from clevis 1A around the left bottom corner of the front endboard to the center right cutout of the front endboard. Run the free end from clevis 18A around the left bottom corner of the rear endboard to the center right cutout of the rear endboard. Secure the free ends with two D-rings and a load binder centered on the right side of the load.

Figure 5-10. Load Lashed to Platform

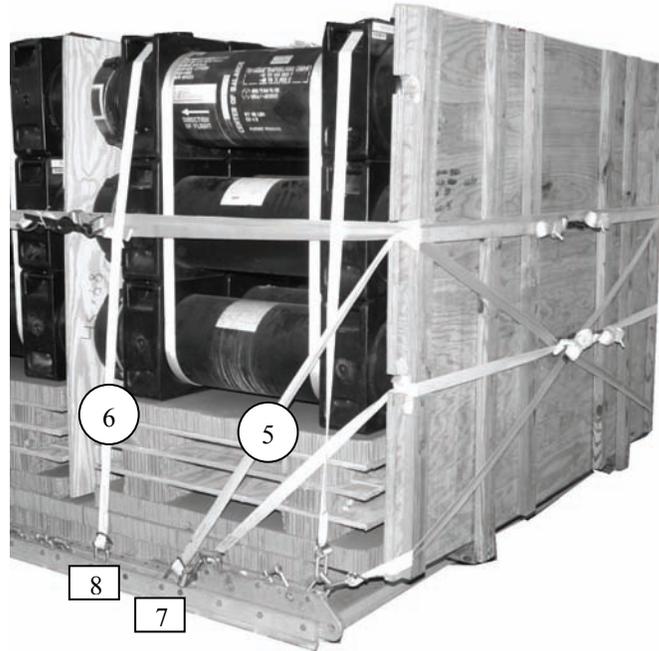
Note. Pad all cutouts with cellulose wadding where the lashings make contact.



Lashing Number	Tiedown Clevis Number	Instructions
3	2 and 2A	Route a 15-foot lashing through clevis 2 and through its own D-ring. Route a 15-foot lashing through clevis 2A and through its own D-ring. Run the free end of the lashing from clevis 2 through the right top carrying handle of the Javelin container on the front right side of stack 1. Run the free end of the lashing from clevis 2A through the left top carrying handle of the Javelin container on the front left side of stack 1. Secure the free ends with two D-rings and a load binder centered on the top of the load.
4	5 and 5A	Route a 15-foot lashing through clevis 5 and through its own D-ring. Route a 15-foot lashing through clevis 5A and through its own D-ring. Run the free end from clevis 5 around the bottom right cutout of the front endboard. Run the free end from clevis 5A around the bottom left cutout of the front endboard. Secure the free ends with two D-rings and a load binder centered on the front endboard.

Figure 5-10. Load Lashed to Platform (Continued)

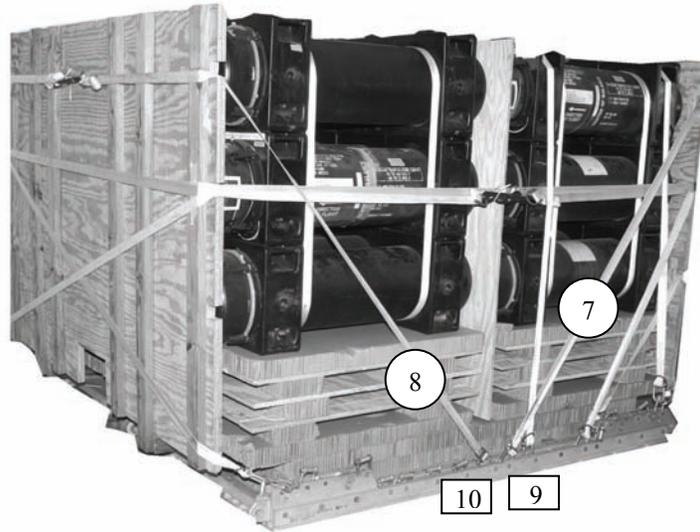
Note. Pad all cutouts with cellulose wadding where the lashings make contact.



Lashing Number	Tiedown Clevis Number	Instructions
5	7 and 7A	Route a 15-foot lashing through clevis 7 and through its own D-ring. Route a 15-foot lashing through clevis 7A and through its own D-ring. Run the free end from clevis 7 around the center right cutout of the front endboard. Run the free end from clevis 7A around the center left cutout of the front endboard. Secure the free ends with two D-rings and a load binder centered on the front endboard.
6	8 and 8A	Route a 15-foot lashing through clevis 8 and through its own D-ring. Route a 15-foot lashing through clevis 8A and through its own D-ring. Run the free end of the lashing from clevis 8 through the right top carrying handle of the Javelin container on the rear right side of stack 1. Run the free end of the lashing from clevis 8A through the left top carrying handle of the Javelin container on the rear left side of stack 1. Secure the free ends with two D-rings and a load binder centered on the top of the load.

Figure 5-10. Load Lashed to Platform (Continued)

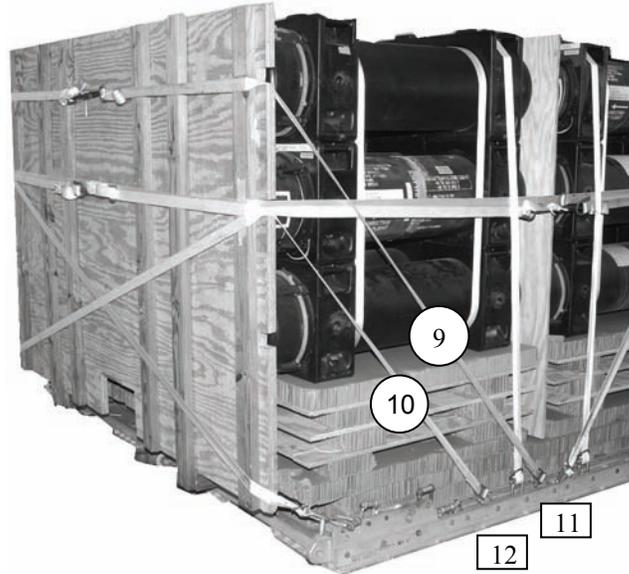
Note. Pad all cutouts with cellulose wadding where the lashings make contact.



Lashing Number	Tiedown Clevis Number	Instructions
7	9 and 9A	Route a 15-foot lashing through clevis 9 and through its own D-ring. Route a 15-foot lashing through clevis 9A and through its own D-ring. Run the free end from clevis 9 around the top right cutout of the front endboard. Run the free end from clevis 9A around the top left cutout of the front endboard. Secure the free ends with two D-rings and a load binder centered on the front endboard.
8	10 and 10A	Route a 15-foot lashing through clevis 10 and through its own D-ring. Route a 15-foot lashing through clevis 10A and through its own D-ring. Run the free end from clevis 10 around the top right cutout of the rear endboard. Run the free end from clevis 10A around the top left cutout of the rear endboard. Secure the free ends with two D-rings and a load binder centered on the rear endboard.

Figure 5-10. Load Lashed to Platform (Continued)

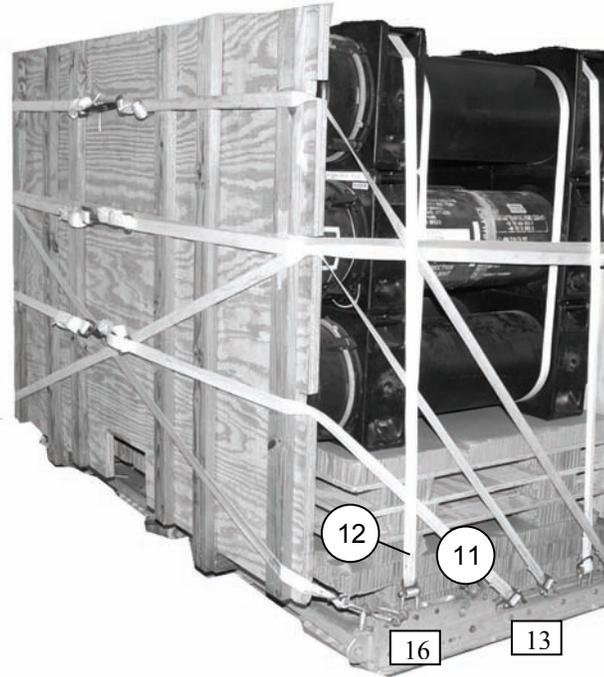
Note. Pad all cutouts with cellulose wadding where the lashings make contact.



Lashing Number	Tiedown Clevis Number	Instructions
9	11 and 11A	Route a 15-foot lashing through clevis 11 and through its own D-ring. Route a 15-foot lashing through clevis 11A and through its own D-ring. Run the free end of the lashing from clevis 11 through the right top carrying handle of the Javelin container on the front right side of stack 2. Run the free end of the lashing from clevis 11A through the left top carrying handle of the Javelin container on the front left side of stack 2. Secure the free ends with two D-rings and a load binder centered on the top of the load.
10	12 and 12A	Route a 15-foot lashing through clevis 12 and through its own D-ring. Route a 15-foot lashing through clevis 12A and through its own D-ring. Run the free end from clevis 12 around the center right cutout of the rear endboard. Run the free end from clevis 12A around the center left cutout of the rear endboard. Secure the free ends with two D-rings and a load binder centered on the rear endboard.

Figure 5-10. Load Lashed to Platform (Continued)

Note. Pad all cutouts with cellulose wadding where the lashings make contact.



Lashing Number	Tiedown Clevis Number	Instructions
11	13 and 13A	Route a 15-foot lashing through clevis 13 and through its own D-ring. Route a 15-foot lashing through clevis 13A and through its own D-ring. Run the free end from clevis 13 around the bottom right cutout of the rear endboard. Run the free end from clevis 13A around the bottom left cutout of the rear endboard. Secure the free ends with two D-rings and a load binder centered on the rear endboard.
12	16 and 16A	Route a 15-foot lashing through clevis 16 and through its own D-ring. Route a 15-foot lashing through clevis 16A and through its own D-ring. Run the free end of the lashing from clevis 16 through the right top carrying handle of the Javelin container on the rear right side of stack 2. Run the free end of the lashing from clevis 16A through the left top carrying handle of the Javelin container on the rear left side of stack 2. Secure the free ends with two D-rings and a load binder centered on the top of the load.

Figure 5-10. Load Lashed to Platform (Continued)

POSITIONING THE FRONT AND REAR ATTITUDE CONTROL BAR (ACB)

5-12. Position the front and rear ACB as shown in Figure 5-11.

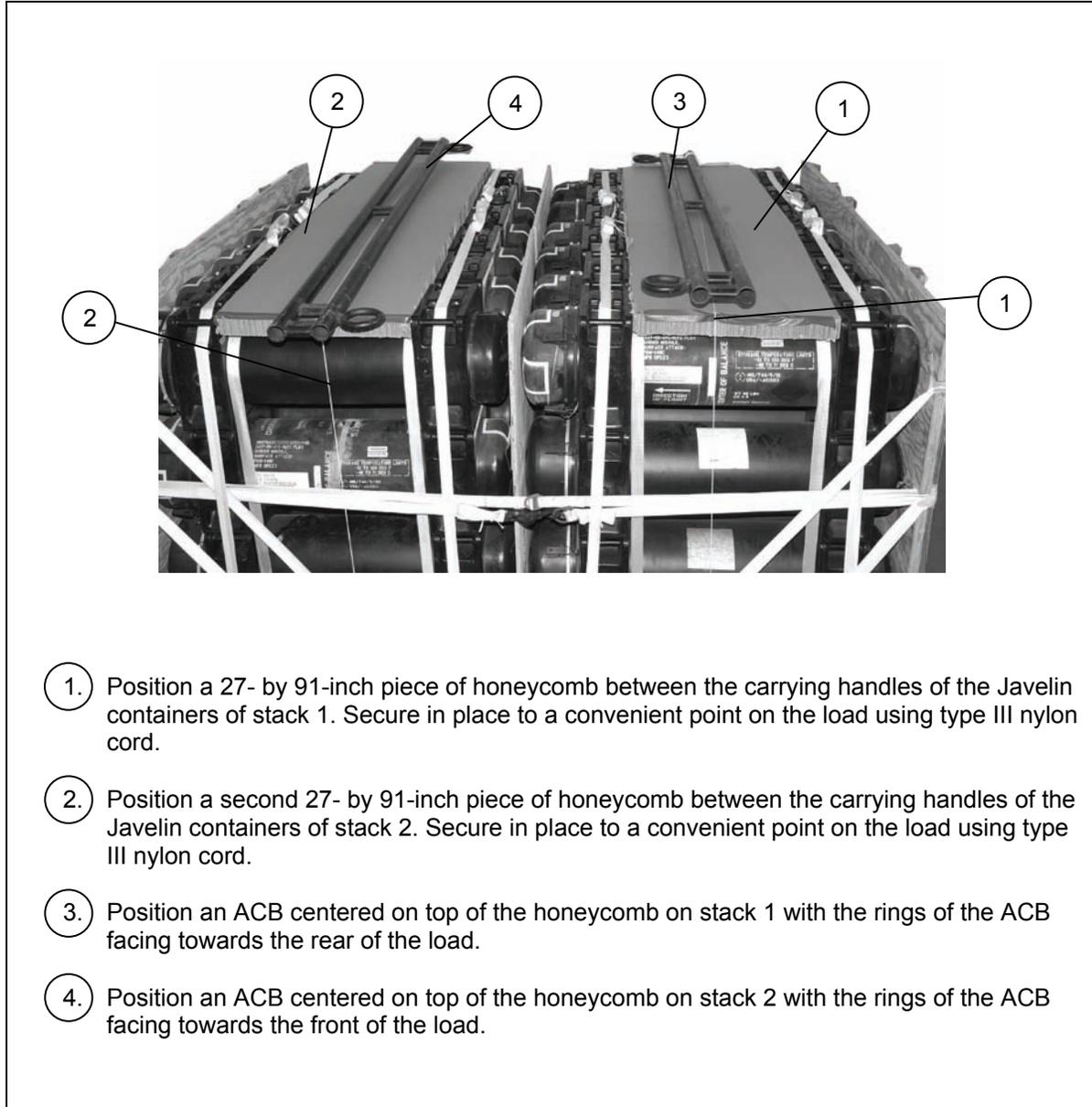
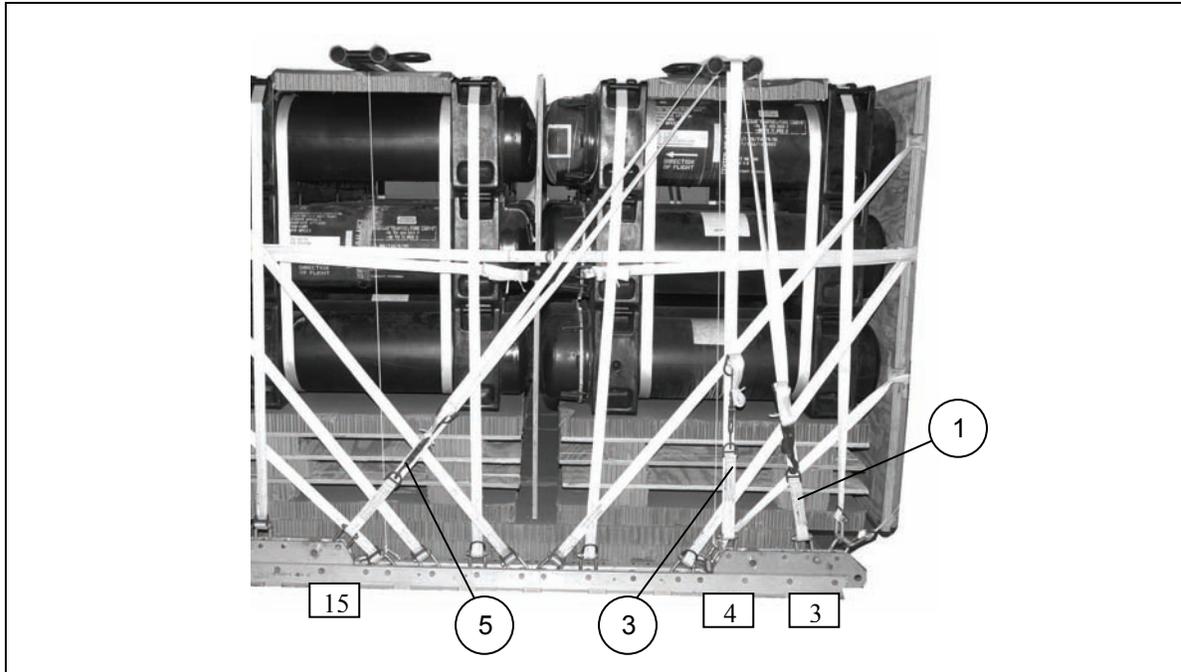


Figure 5-11. Front and Rear ACB Positioned

LASHING THE FRONT ACB TO HONEYCOMB STACK 1

5-13. Lash the front ACB to stack 1 as shown in Figure 5-12.



Lashing Number	Tiedown Clevis Number	Instructions
1	3	Route a 15-foot lashing through clevis 3, upward through the front bar of the front ACB, and back to clevis 3. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
2	3A	Route a 15-foot lashing through clevis 3A, upward through the front bar of the front ACB, and back to clevis 3A. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
3	4	Route a 15-foot lashing through clevis 4, upward through the middle portion of the front ACB, and back to clevis 4. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
4	4A	Route a 15-foot lashing through clevis 4A, upward through the middle portion of the front ACB, and back to clevis 4A. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
5	15	Route a 15-foot lashing through clevis 15, upward through the rear bar of front ACB, and back to clevis 15. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
6	15A	Route a 15-foot lashing through clevis 15A, upward through the rear bar of front ACB, and back to clevis 15A. Attach a D-ring and load binder. TIGHTEN all lashings at this time.

Figure 5-12. Front ACB Lashed to Honeycomb Stack 1

LASHING THE REAR ACB TO HONEYCOMB STACK 2

5-14. Lash the rear ACB to stack 2 as shown in Figure 5-13.

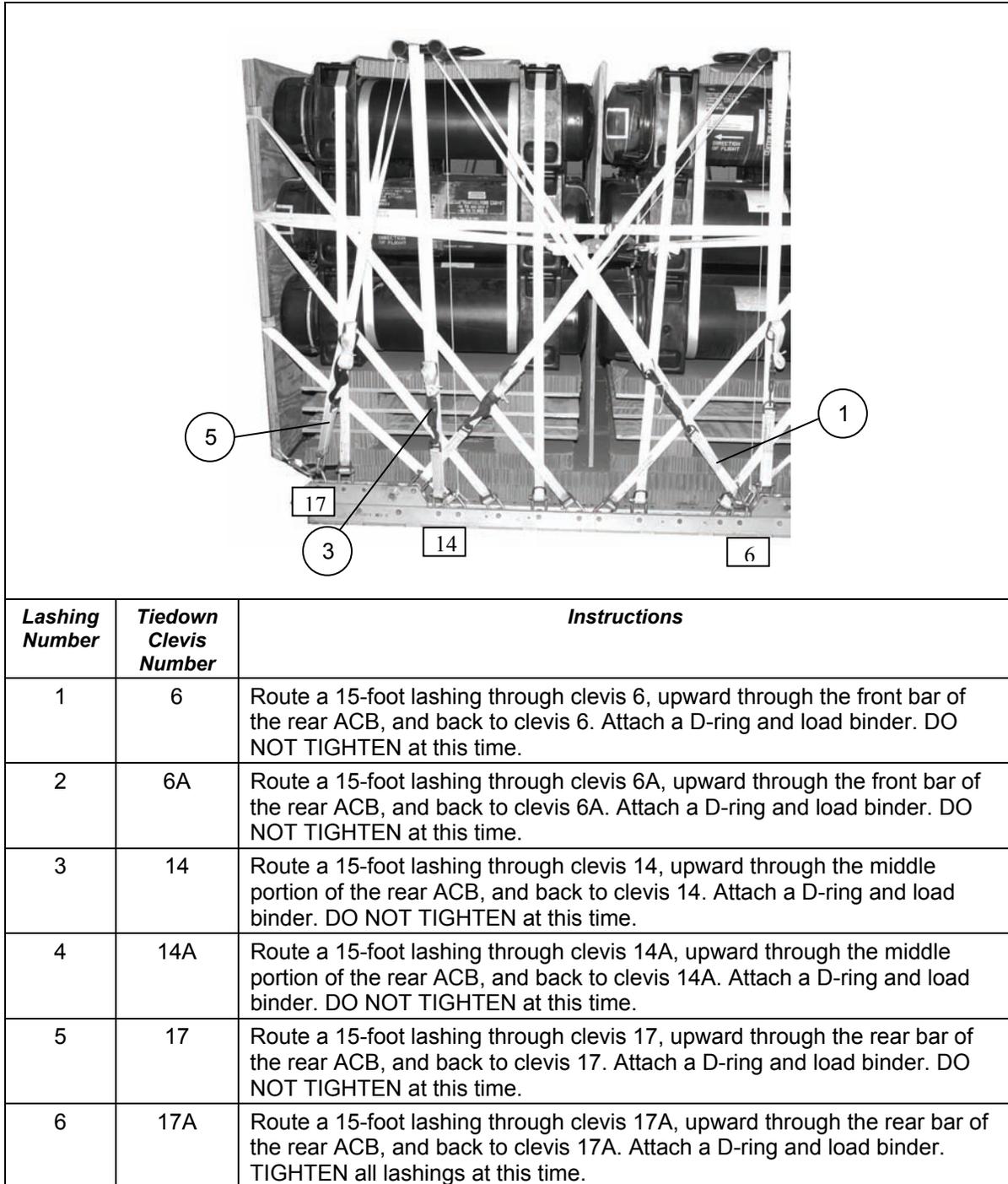
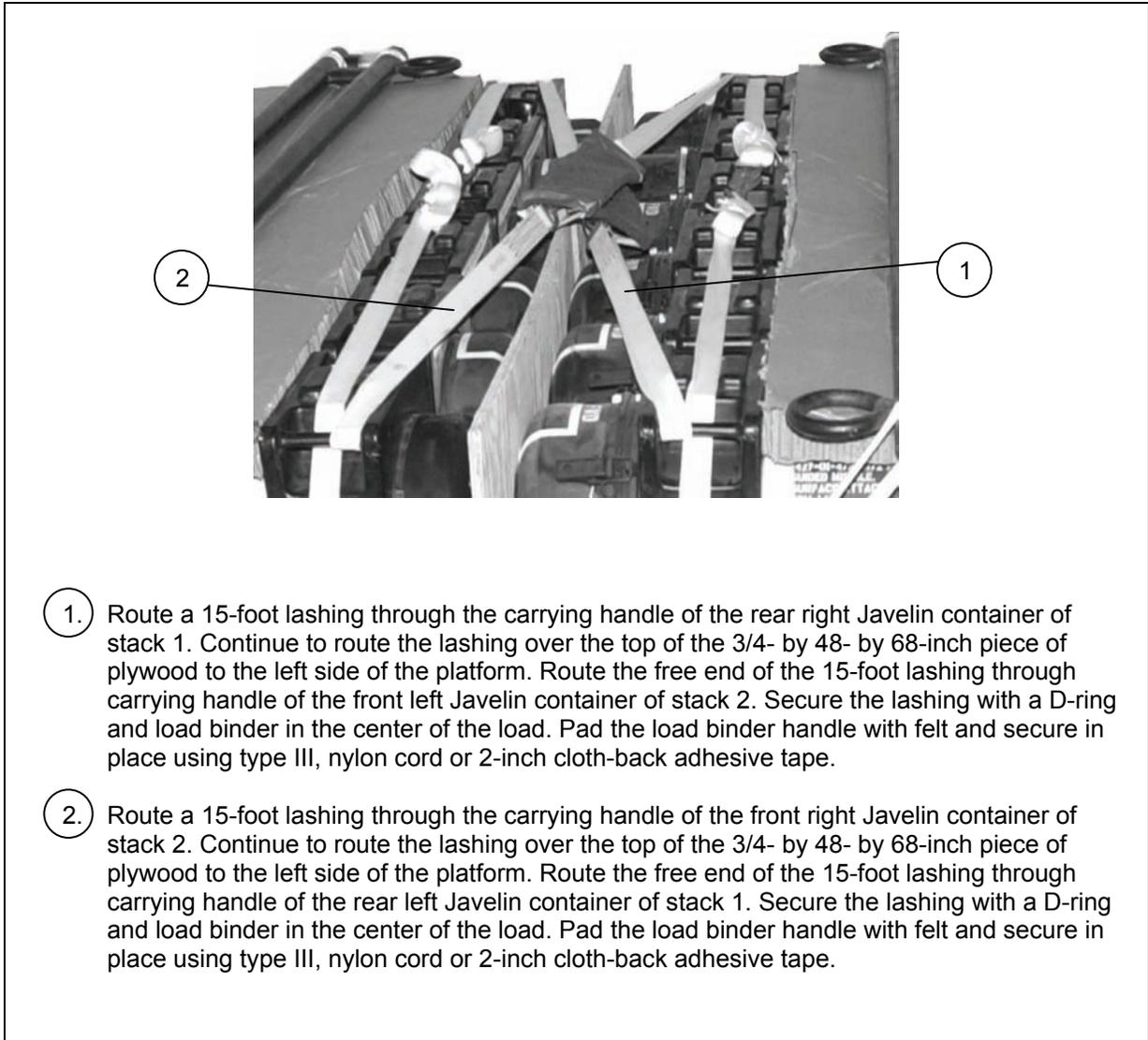


Figure 5-13. Rear ACB Lashed to Honeycomb Stack 2.

SECURING PLYWOOD BETWEEN STACK 1 AND STACK 2

5-15. Secure the plywood between stacks 1 and 2 as shown in Figure 5-14.



1. Route a 15-foot lashing through the carrying handle of the rear right Javelin container of stack 1. Continue to route the lashing over the top of the 3/4- by 48- by 68-inch piece of plywood to the left side of the platform. Route the free end of the 15-foot lashing through carrying handle of the front left Javelin container of stack 2. Secure the lashing with a D-ring and load binder in the center of the load. Pad the load binder handle with felt and secure in place using type III, nylon cord or 2-inch cloth-back adhesive tape.
2. Route a 15-foot lashing through the carrying handle of the front right Javelin container of stack 2. Continue to route the lashing over the top of the 3/4- by 48- by 68-inch piece of plywood to the left side of the platform. Route the free end of the 15-foot lashing through carrying handle of the rear left Javelin container of stack 1. Secure the lashing with a D-ring and load binder in the center of the load. Pad the load binder handle with felt and secure in place using type III, nylon cord or 2-inch cloth-back adhesive tape.

Figure 5-14. Plywood Between Stack 1 and 2 Secured

INSTALLING SUSPENSION SLINGS

5-16. Install the suspension slings and deadman's tie as shown in Figure 5-15.

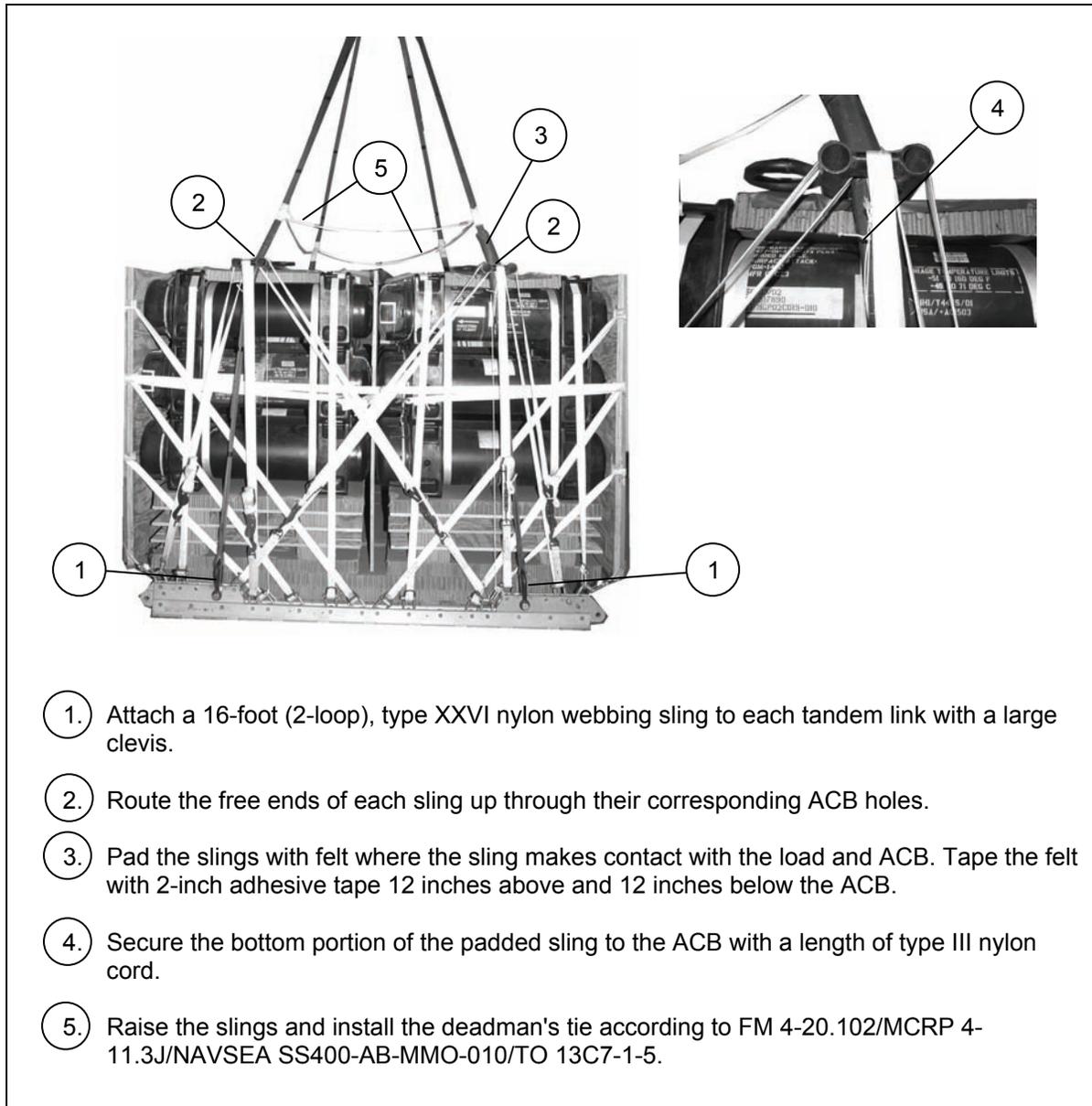


Figure 5-15. Suspension Slings and Deadman's Tie Installed

PREPARING AND STOWING CARGO PARACHUTES

5-17. Prepare and stow the cargo parachutes as shown in Figure 5-16.

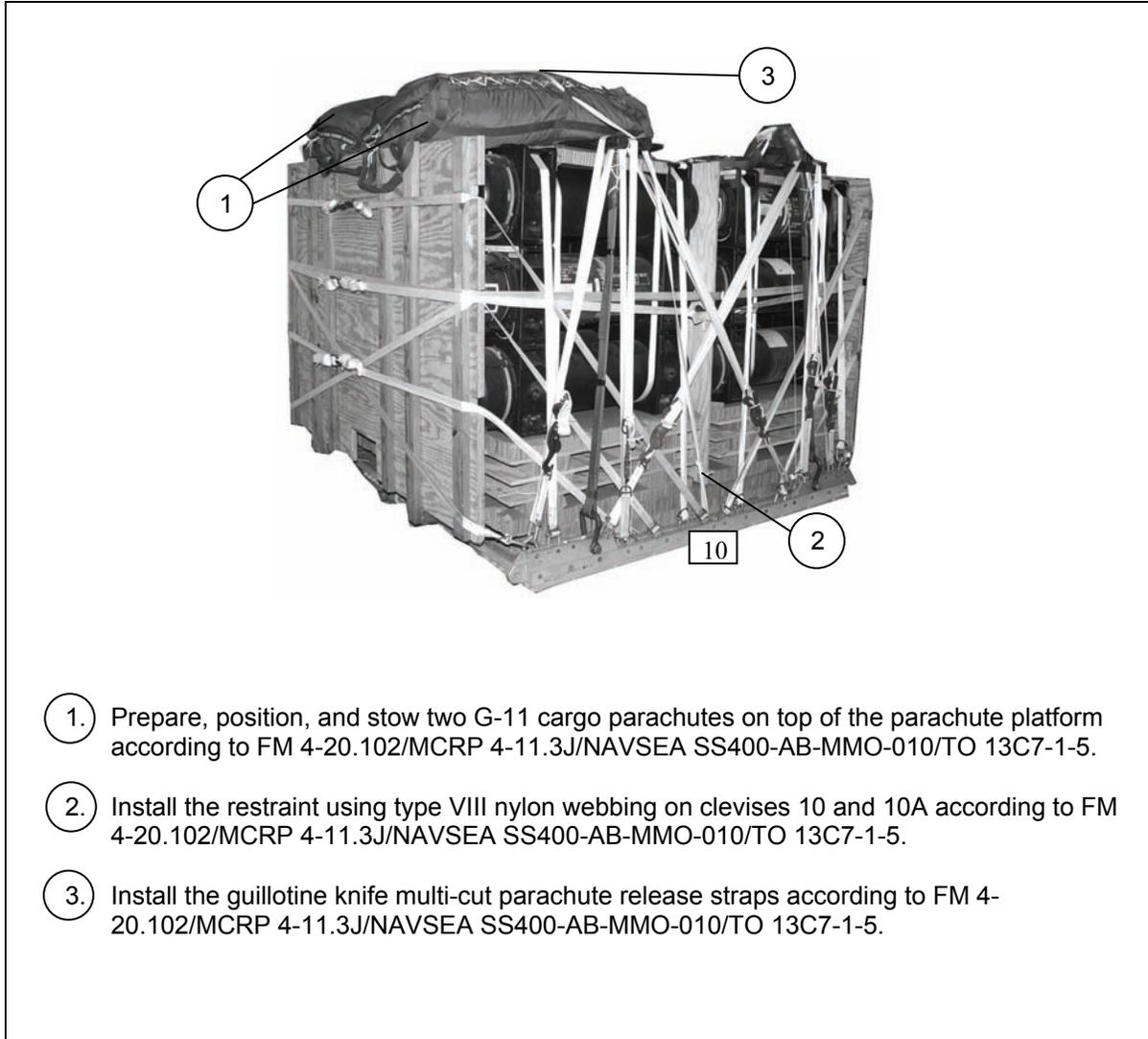


Figure 5-16. Cargo Parachutes Prepared and Stowed

INSTALLING THE RELEASE SYSTEM

5-18. Prepare, attach, and safety an M-1 cargo parachute release according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 5-17.

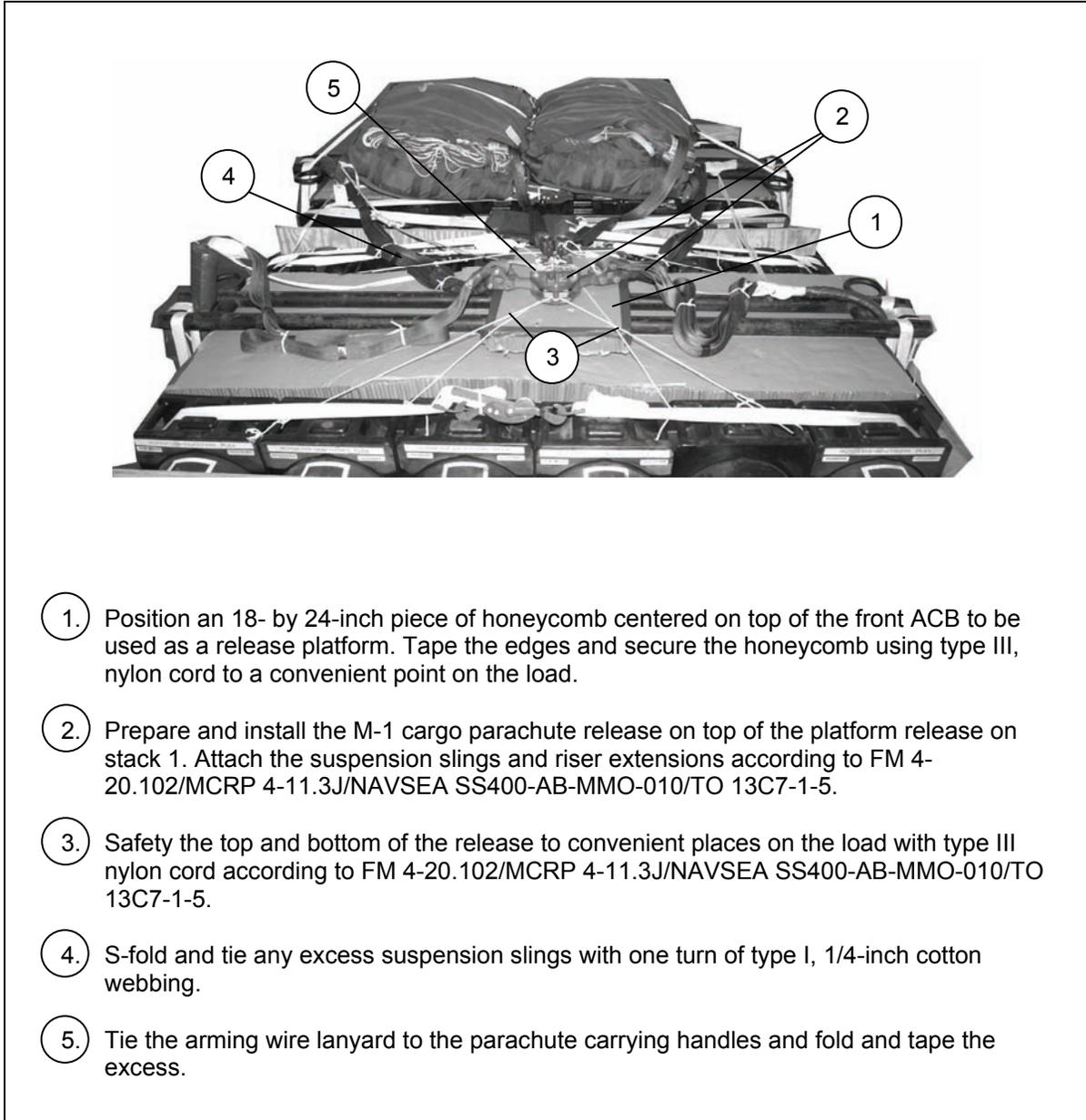


Figure 5-17. Cargo Parachute Release Installed

INSTALLING THE EXTRACTION SYSTEM

5-19. Install the extraction system as shown in Figure 5-18.

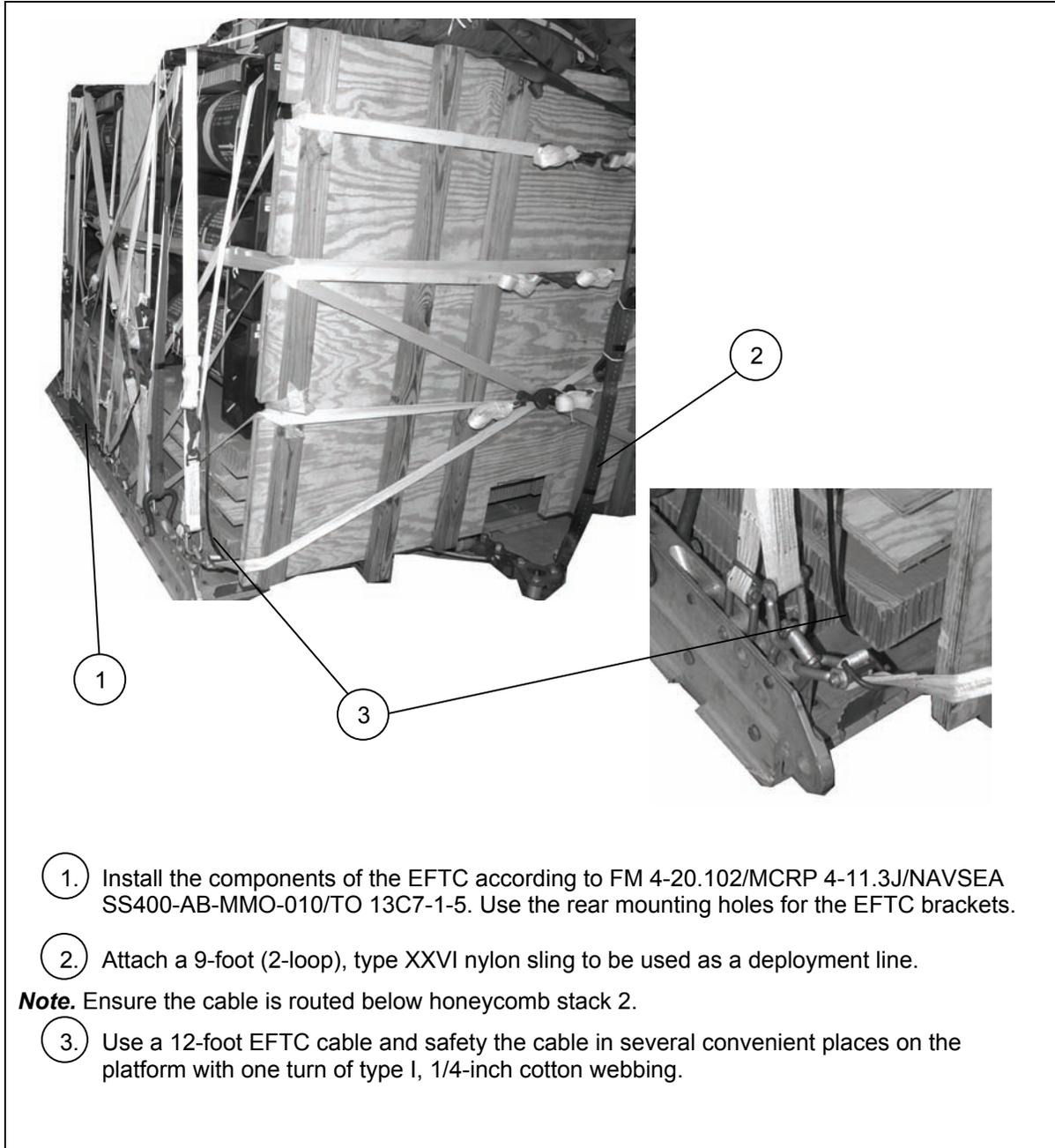


Figure 5-18. Extraction System Installed

PLACING EXTRACTION PARACHUTE

5-20. Select the extraction parachute and extraction line needed using the extraction line requirements table in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Place the extraction parachute and line on the load for installation in the aircraft.

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

5-21. Select and install the provisions for the emergency aft restraints according to the emergency aft restraint requirements table in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

MARKING RIGGED LOAD

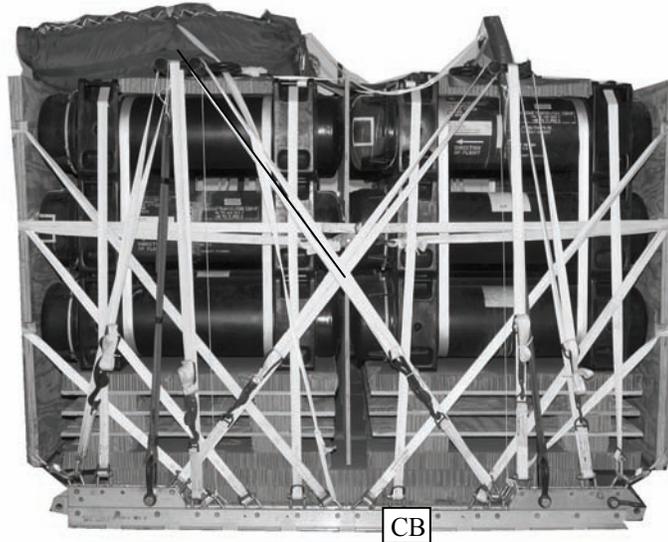
5-22. Mark the rigged load according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 5-19. Complete Declaration for Dangerous Goods. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

EQUIPMENT REQUIRED

5-23. Use the equipment listed in Table 5-1 to rig this load.

CAUTION

Make the final rigger inspection required by AR 59-4 and FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight: Load shown.....	6,620 pounds
Height	94 inches
Width	108 inches
Overall Length.....	125 inches
Overhang: Front	11 inches
Rear	18 inches
Center of Balance (from front edge of the platform)	54 inches
Extraction System with 12-foot cable (adds 18 inches to length of platform)	EFTC

Figure 5-19. Javelin Missile Containers (Plastic) Rigged on an 8-Foot, Type V Platform for Low-Velocity Airdrop

Table 5-1. Equipment Required for Rigging Javelin Missile Containers (Plastic) on an 8-Foot, Type V Platform for Low-Velocity Airdrop

<i>National Stock Number</i>	<i>Item</i>	<i>Quantity</i>
8040-00-273-8713	Adhesive, paste, 1-gallon	As required
1670-00-003-4389	Bar, attitude control	2
	Clevis, suspension:	
4030-00-678-8562	3/4-inch (medium) emergency restraint	4
4030-00-090-5354	1-inch (large)	5
4020-00-240-2146	Cord, nylon, type III	As required
1670-00-434-5797	Coupling, airdrop, extraction force transfer with 12-foot cable	1
1670-00-360-0328	Cover, clevis, large	2
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
1670-01-183-2678	Leaf, extraction line	2
	Line, extraction, type XXVI nylon webbing:	
1670-01-062-6313	60-foot (3-loop)	1
	Or	
1670-01-107-7651	140-foot (3-loop)	2
1670-01-064-4452	60-foot (1-loop), type XXVI for C-17 drogue line	1
	Link assembly, two-point:	
5306-00-435-8994	Bolt, 1-inch diameter, 4-inch long	1
5310-00-232-5165	Nut, 1-inch, hexagonal	1
1670-00-003-3454	Plate, side 3 3/4-inch	1
5365-00-007-3414	Spacer, large	1
510-00-220-6146	Lumber, 2-by 4- by 96	As required
	Nail	
5315-00-010-4657	6d	As required
5315-00-753-3883	16d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb	17 sheets
	Parachute:	
1670-01-016-7841	Cargo, G-11B	2
1670-01-063-3716	Cargo, extraction, 22-foot	1
	Platform, airdrop, type V, 8-foot	
1670-01-353-8425	Bracket assembly, EFTC	1
1670-01-162-2372	Bracket assembly, extraction	1
1670-01-162-2376	Clevis assembly	36
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-inch	16 sheets
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 5-1. Equipment Required for Rigging Javelin Missile Containers (Plastic) on an 8-Foot, Type V Platform for Low-Velocity Airdrop (Continued)

<i>National Stock Number</i>	<i>Item</i>	<i>Quantity</i>
	Sling, cargo airdrop:	
	For deployment line:	
1670-01-062-6304	9-foot (2-loop), type XXVI nylon webbing	1
	For riser extension:	
1670-01-062-6302	3-foot (2-loop), type XXVI nylon webbing	4
	For suspension:	
1670-01-063-7761	16-foot (2-loop), type XXVI nylon webbing	4
1670-00-040-8219	Strap parachute release, multicut	2
7515-00-266-5016	Tape, adhesive, 2-inch	As required
7501-00-266-6710	Tape, masking	As required
1670-00-937-0271	Tie-down assembly, 15-foot	48
	Webbing:	
8305-00-268-2411	Cotton, 1/4-inch, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-inch	As required
8305-00-263-3591	Type VIII webbing	As required

SECTION II-RIGGING JAVELIN MISSILE CONTAINERS ON A 16-FOOT, TYPE V PLATFORM

DESCRIPTION OF LOAD

5-24. The guided missile, surface, attack Javelin (plastic) container mass supply load is rigged on a 16-foot, type V platform. The rigged weight is 10,380 pounds. Each individual missile container weighs approximately 96 pounds. The load is rigged with 66 Javelin containers. The height of the load is 94 inches, length is 192 inches and the width is 108 inches. The accompanying load has a weight of 6,336 pounds. The load is rigged with two G-11 cargo parachutes.

PREPARING PLATFORM

5-25. Prepare a 16-foot, type V platform as shown in Figure 5-20.

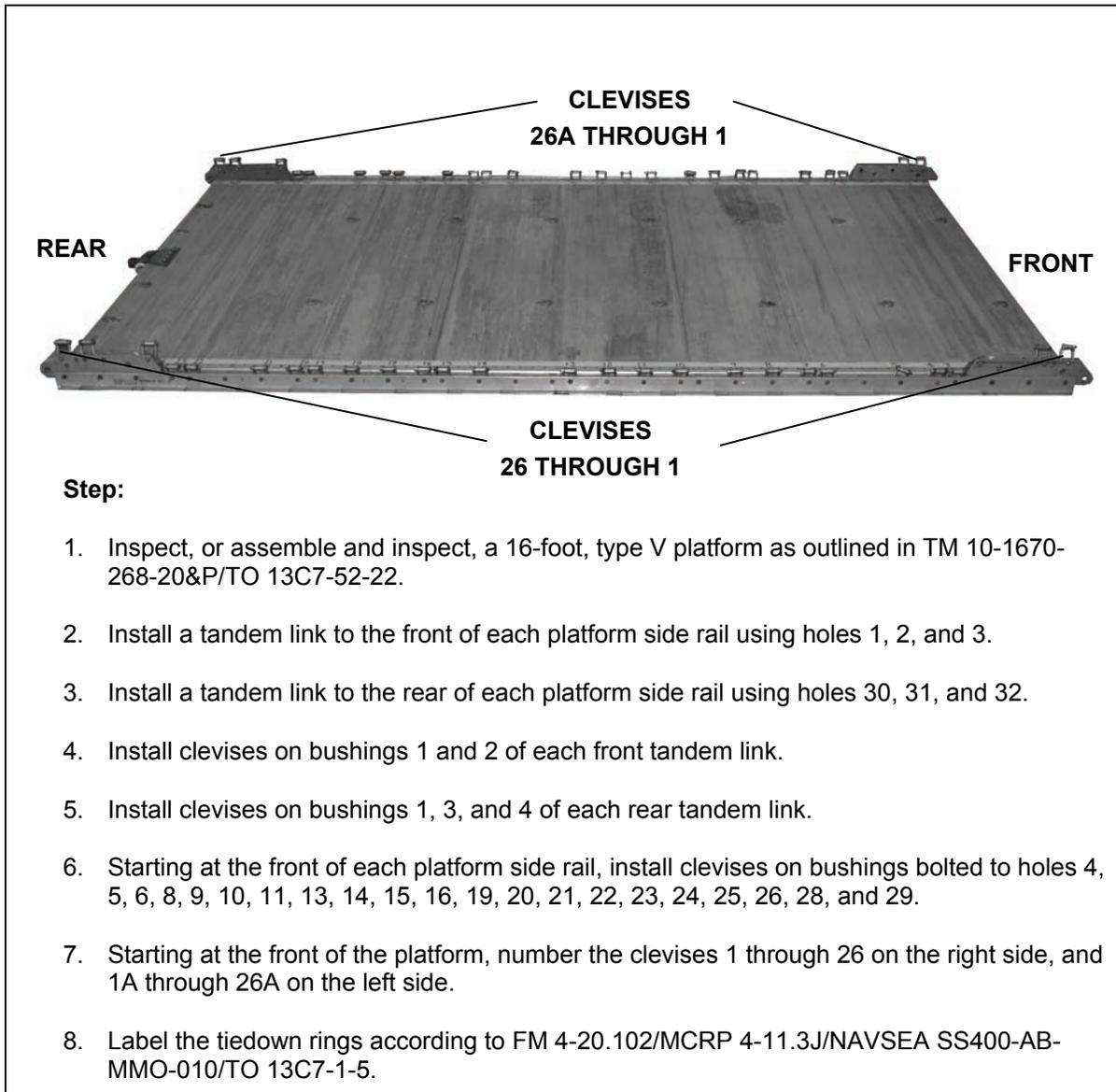
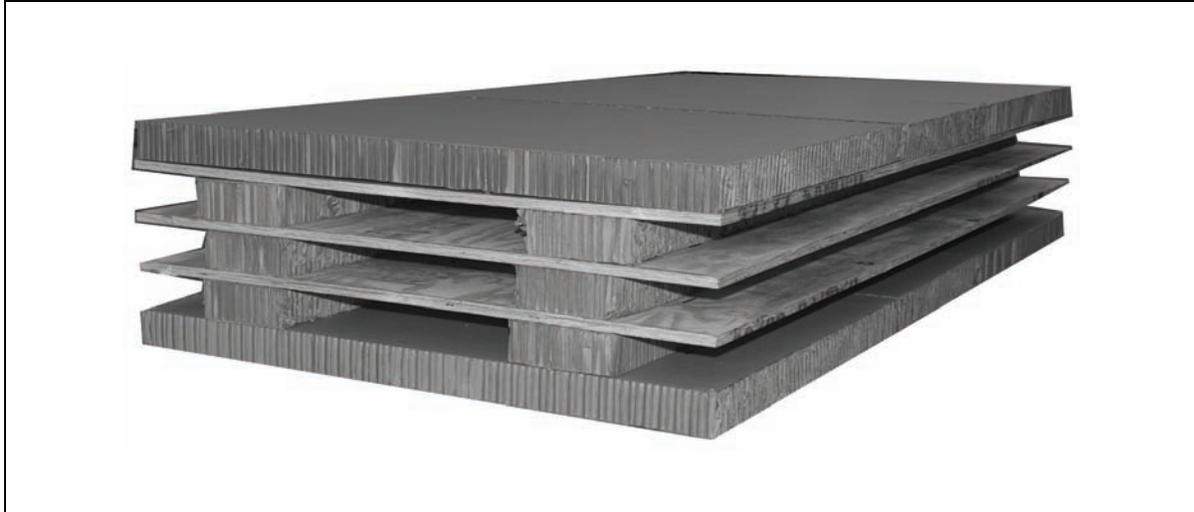


Figure 5-20. Platform Prepared

PREPARING HONEYCOMB STACKS

5-26. Prepare honeycomb stacks 1, 2, and 3 as shown in Figure 5-21.

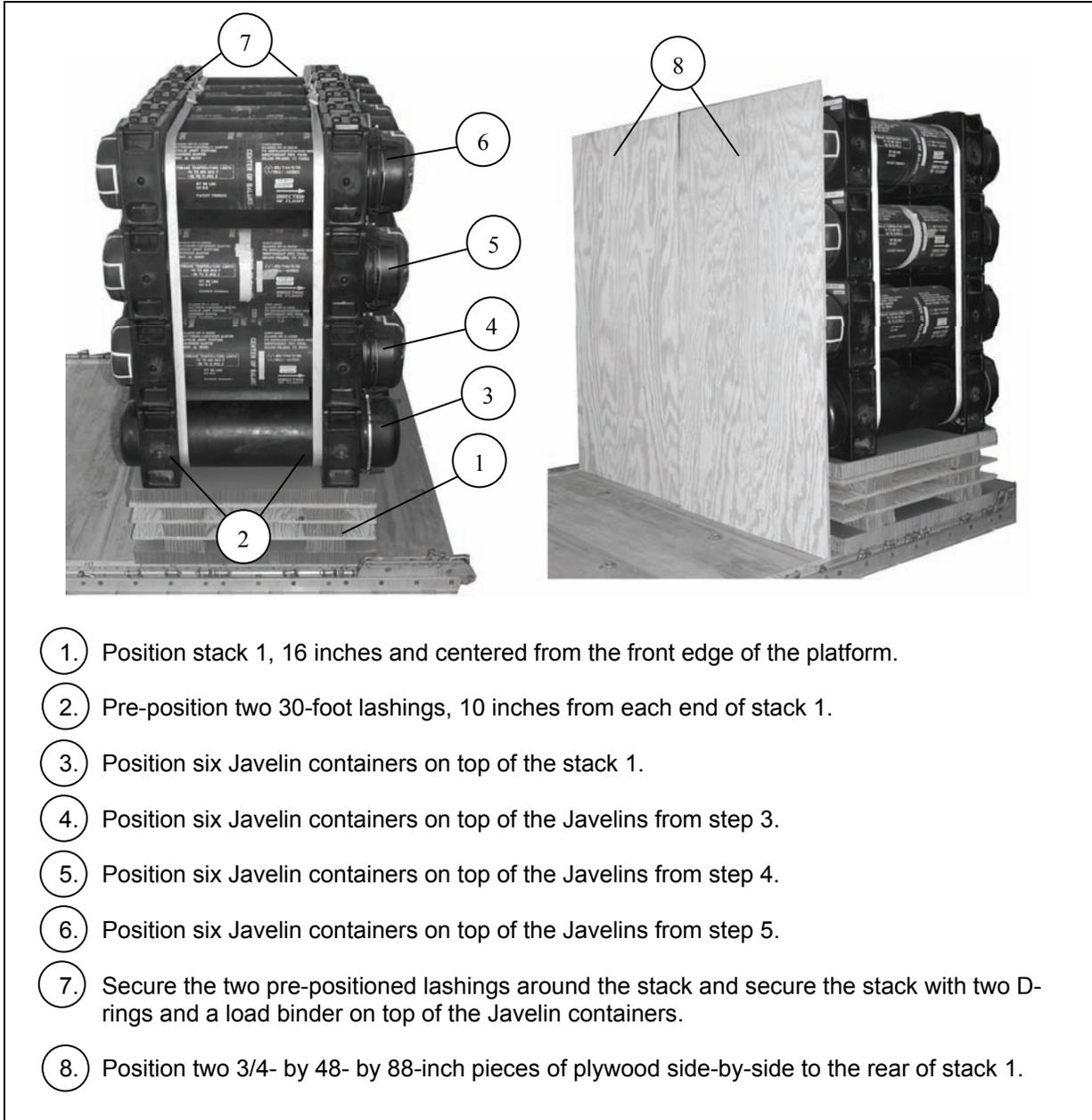


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1,2,and 3	1	24	48	Honeycomb	Cut a piece to start to form the base.
	2	36	48	Honeycomb	Cut the pieces and position to the outside of the 48- by 24-inch piece of honeycomb.
	2	8	92	Honeycomb	Cut pieces and glue 6 inches from the front and rear on top of the previous step.
	1	96	48	3/4-inch plywood	Glue the plywood on top of the 8- by 92-inch pieces of honeycomb.
	2	8	96	Honeycomb	Cut pieces and glue 6 inches from the front and the rear on top of the plywood.
	1	96	48	3/4-inch plywood	Glue the plywood on top of the 8- by 92-inch pieces of honeycomb.
	2	8	96	Honeycomb	Cut pieces and glue 6 inches from the front and the rear on top of the plywood.
	1	96	48	3/4-inch plywood	Glue the plywood on top of the 8- by 92-inch pieces of honeycomb.
	1	24	48	Honeycomb	Glue centered on top of the 92- by 48-inch plywood.
	2	36	48	Honeycomb	Cut the pieces and position to the outside of the 48- by 24-inch piece of honeycomb.

Figure 5-21. Honeycomb Stacks 1, 2, and 3 Prepared

POSITIONING AND SECURING JAVELINS ON STACK 1

5-27. Position and secure the Javelins on stack 1 as shown in Figure 5-22.



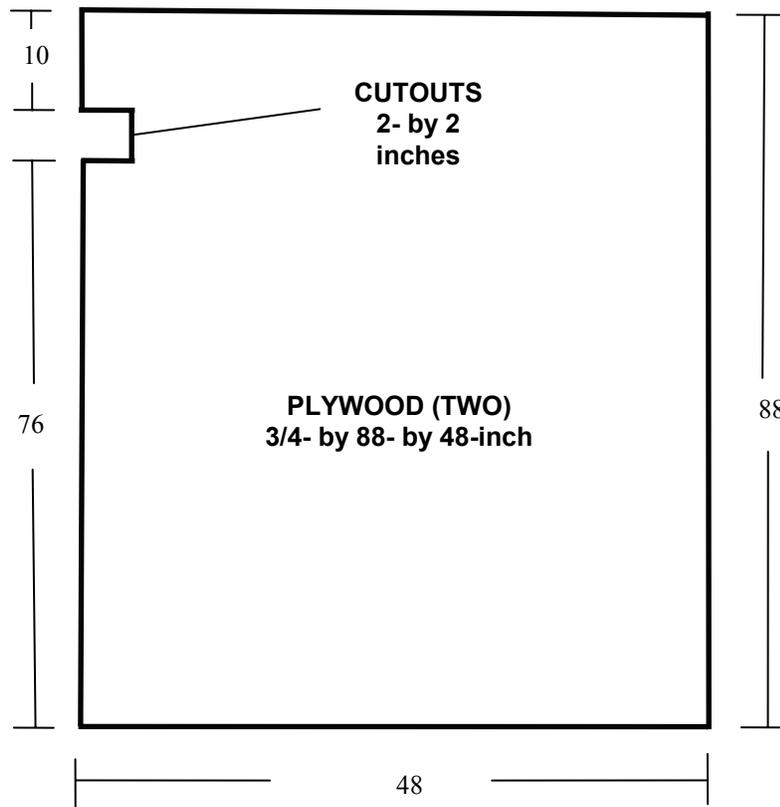
1. Position stack 1, 16 inches and centered from the front edge of the platform.
2. Pre-position two 30-foot lashings, 10 inches from each end of stack 1.
3. Position six Javelin containers on top of the stack 1.
4. Position six Javelin containers on top of the Javelins from step 3.
5. Position six Javelin containers on top of the Javelins from step 4.
6. Position six Javelin containers on top of the Javelins from step 5.
7. Secure the two pre-positioned lashings around the stack and secure the stack with two D-rings and a load binder on top of the Javelin containers.
8. Position two 3/4- by 48- by 88-inch pieces of plywood side-by-side to the rear of stack 1.

Figure 5-22. Javelins Positioned and Secured on Stack 1

CONSTRUCTING ENDBOARD FOR STACK 2

5-28. Construct an endboard for the rear of stack 2 as shown in Figure 5-23.

- Notes.** 1. This drawing is not to scale.
2. All dimensions are in inches.



Step:

1. Cut two 3/4- by 48- by 88-inch pieces of plywood.
2. Make one 2- by 2-inch cutout on each endboard as shown.

Figure 5-23. Endboard Constructed for Stack 2

POSITIONING AND SECURING JAVELINS AND PLACING ENDBOARDS ON STACK 2

5-29. Position and secure the Javelins on stack 2 as shown in Figure 5-24.

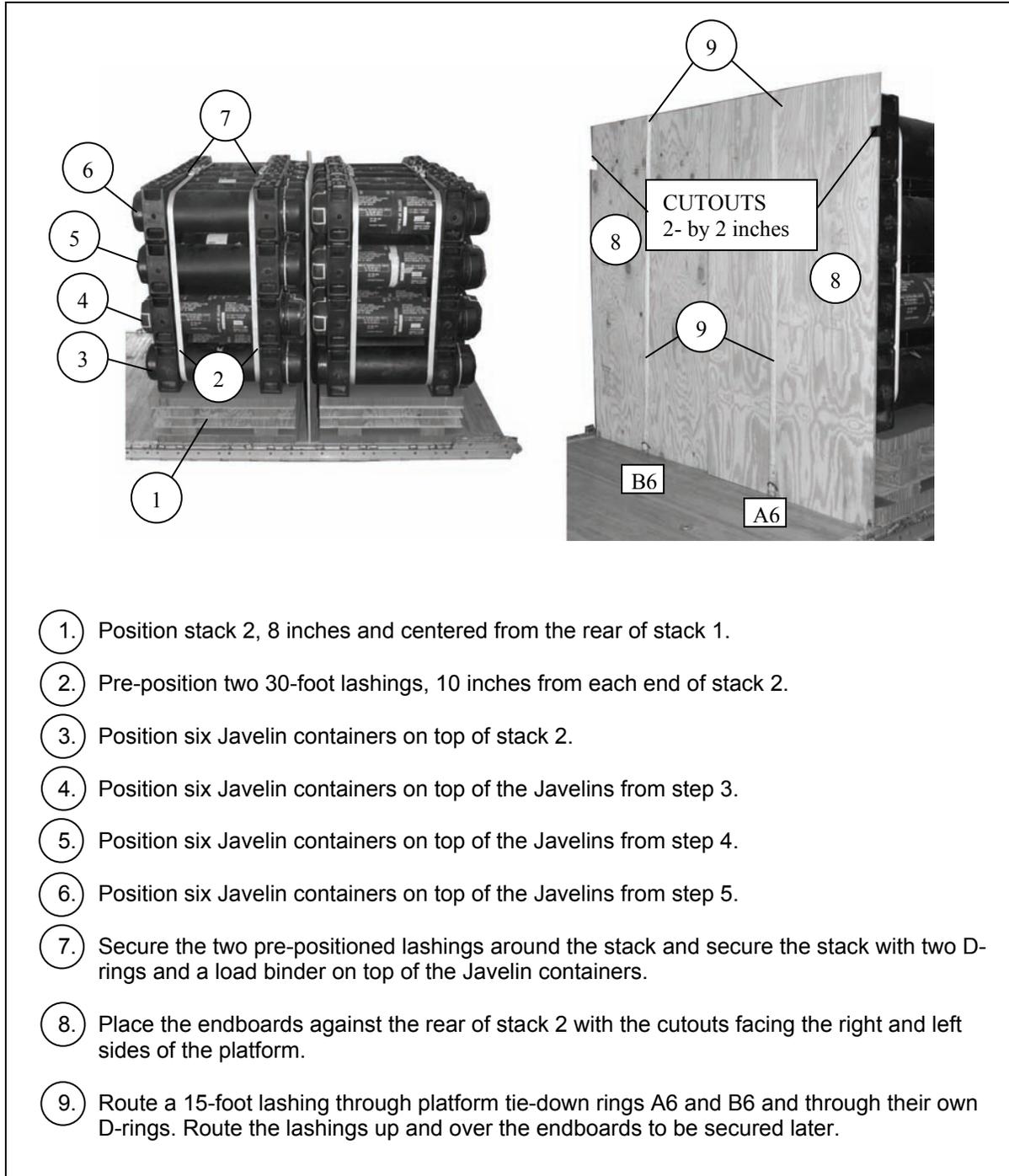
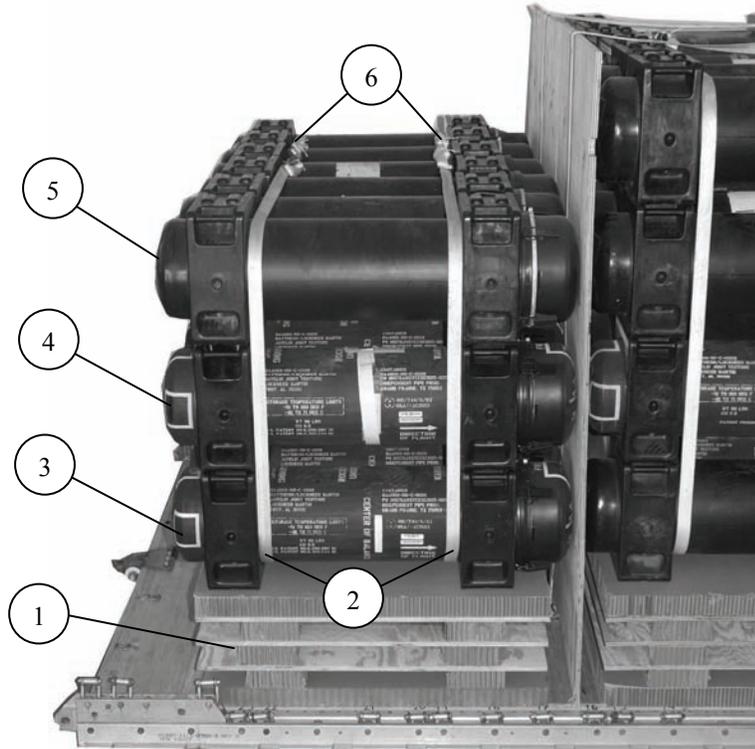


Figure 5-24. Javelins Positioned and Secured and Endboards Placed on Stack 2

POSITIONING AND SECURING JAVELINS ON STACK 3

5-30. Position and secure the Javelins on stack 3 as shown in Figure 5-25.



1. Position stack 3, eight inches and centered from the rear of stack 2.
2. Pre-position two 30-foot lashings, 10 inches from each end of stack 3.
3. Position six Javelin containers on top of stack 3.
4. Position six Javelin containers on top of the Javelins from step 3.
5. Position six Javelin containers on top of the Javelins from step 4.
6. Secure the two pre-positioned lashings around the stack and secure the stack with two D-rings and a load binder on top of the Javelin containers.

Figure 5-25. Javelins Positioned and Secured on Stack 3

CONSTRUCTING FRONT ENDBOARD

5-31. Construct the front endboard as shown in Figure 5-26.

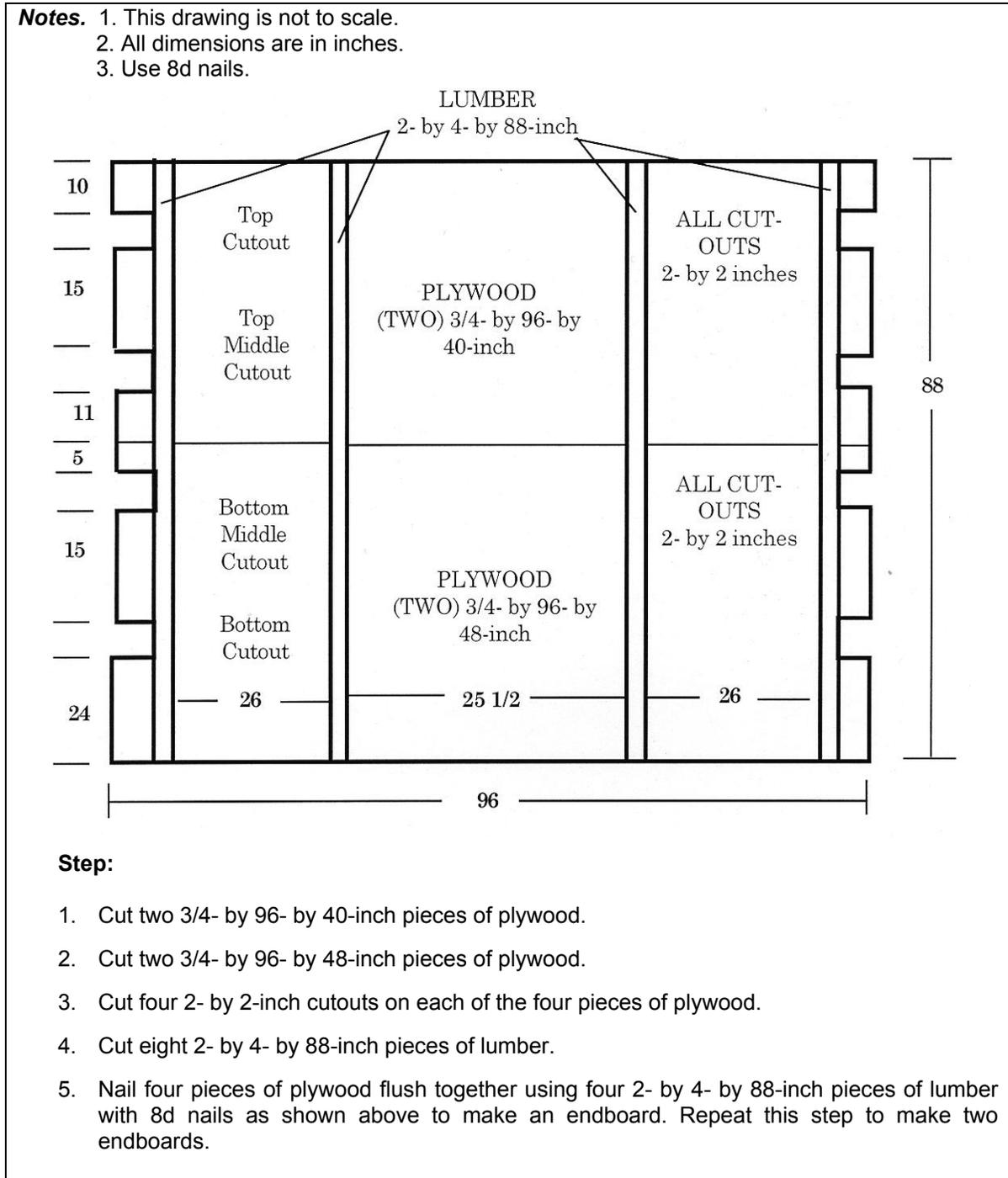
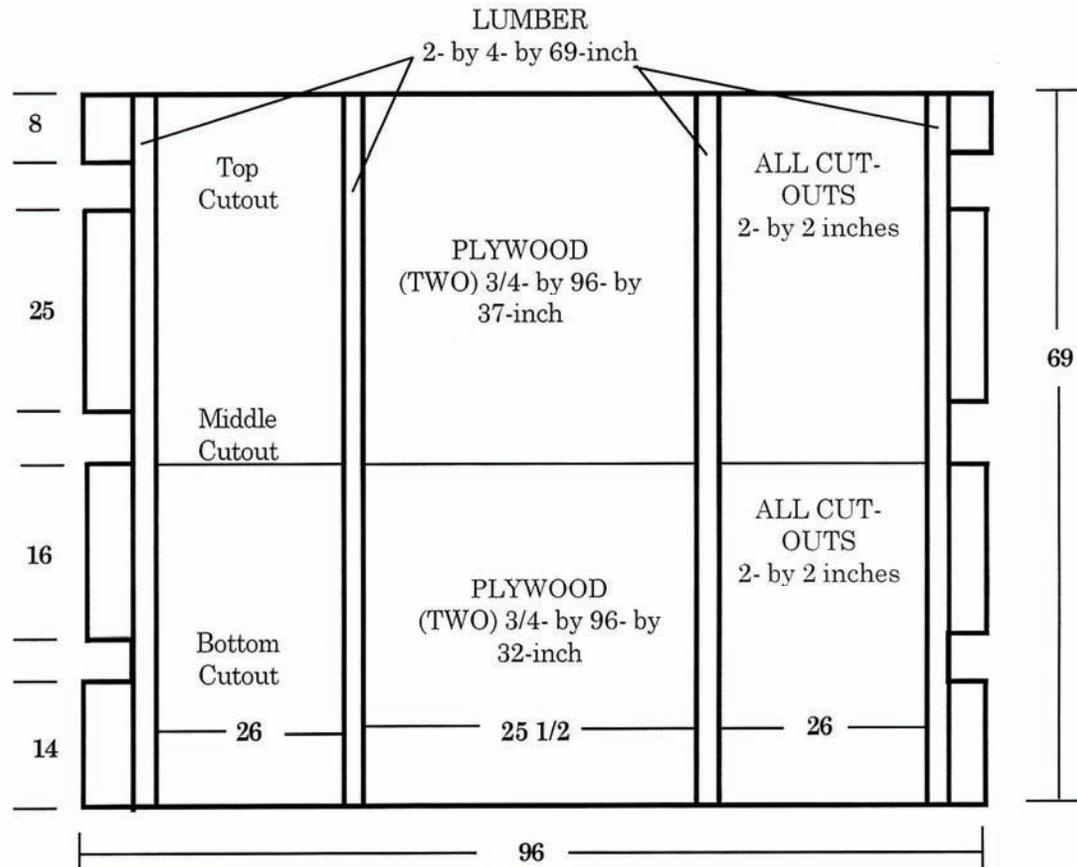


Figure 5-26. Front Endboard Constructed

CONSTRUCTING REAR ENDBOARD

5-32. Construct the rear endboard as shown in Figure 5-27.

- Notes.**
1. This drawing is not to scale.
 2. All dimensions are in inches.
 3. Use 8d nails.



Step:

1. Cut two 3/4- by 96- by 37-inch pieces of plywood.
2. Cut two 3/4- by 96- by 32-inch pieces of plywood.
3. Cut 2- by 2-inch cutouts on each of the four pieces of plywood as shown above.
4. Cut four 2- by 4- by 69-inch pieces of lumber.
5. Nail two pieces of plywood flush together using four 2- by 4- by 69-inch pieces of lumber with 8d nails as shown above to make an endboard. Repeat this step to make two endboards.

Figure 5-27. Rear Endboard Constructed

POSITIONING AND SECURING FRONT ENDBOARD AND POSITIONING REAR ENDBOARD

5-33. Position and secure the front endboard and position the rear endboard as shown in Figure 5-28.

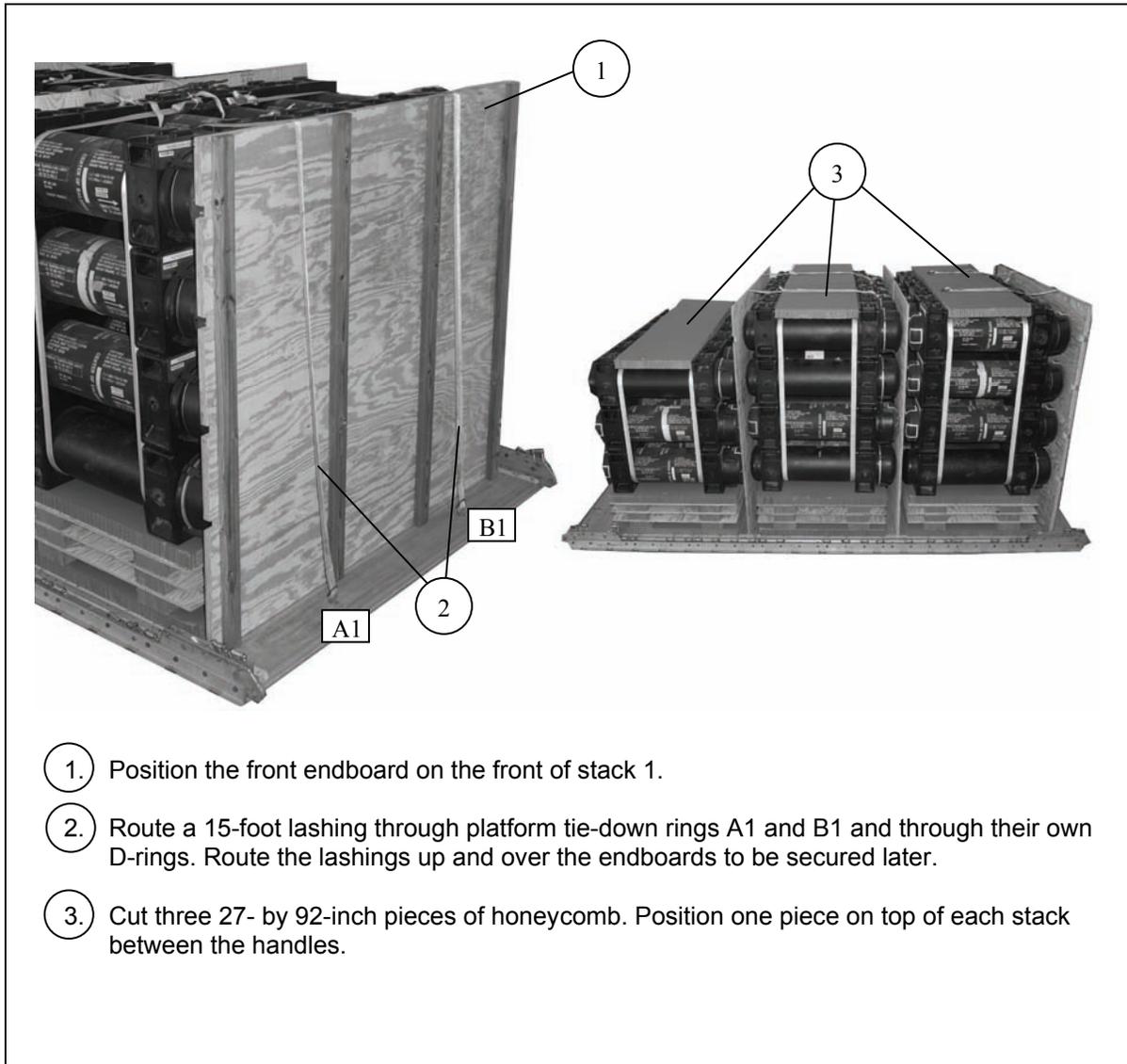
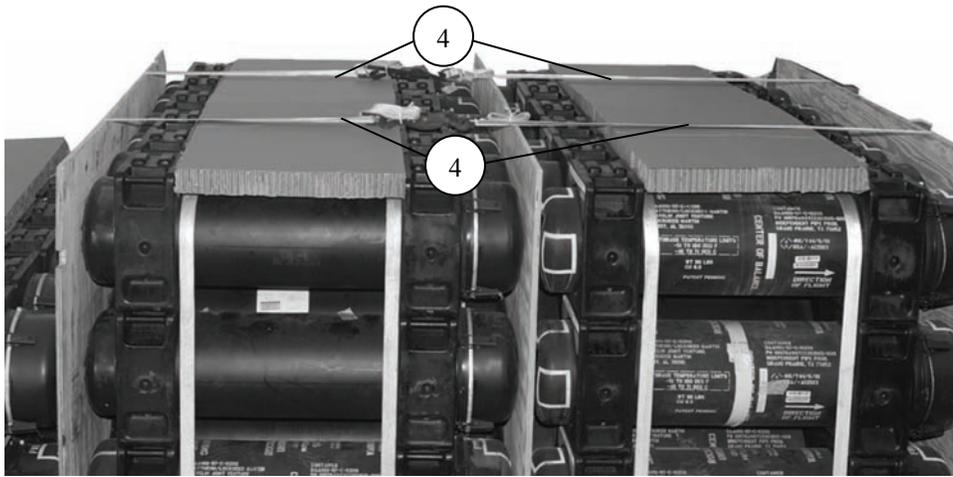


Figure 5-28. Front Endboard Positioned and Secured and Rear Endboard Positioned



4. Secure the pre-routed lashing of clevis A1 to A6 and clevis B1 to B6 on the top of the front of stack two with two D-rings and load binder.
5. Position the rear endboard to the rear of stack 3 with the 2- by 4-inch piece of lumber side to the outside rear of the load.

Figure 5-28. Front Endboard Positioned and Secured and Rear Endboard Positioned (Continued)

LASHING LOAD TO PLATFORM

5-34. Lash the load to the platform as shown in Figure 5-29.

Note. Pad all cutouts with cellulose wadding where the lashings make contact.

Lashing Number	Tiedown Clevis Number	Instructions
1	1 and 26	Route a 15-foot lashing through clevis 1 and through its own D-ring. Route a 15-foot lashing through clevis 26 and through its own D-ring. Form a 30-foot lashing on the left side of the platform. Run the free end to the bottom middle cutout of the front endboard and the other free end to the left middle cutout of the rear endboard. Secure the free ends to the lashings from 1 and 26. Position the load binder in the center of the endboards temporarily until lashing 19 when the load binder will be repositioned.

Figure 5-29. Load Lashed to Platform

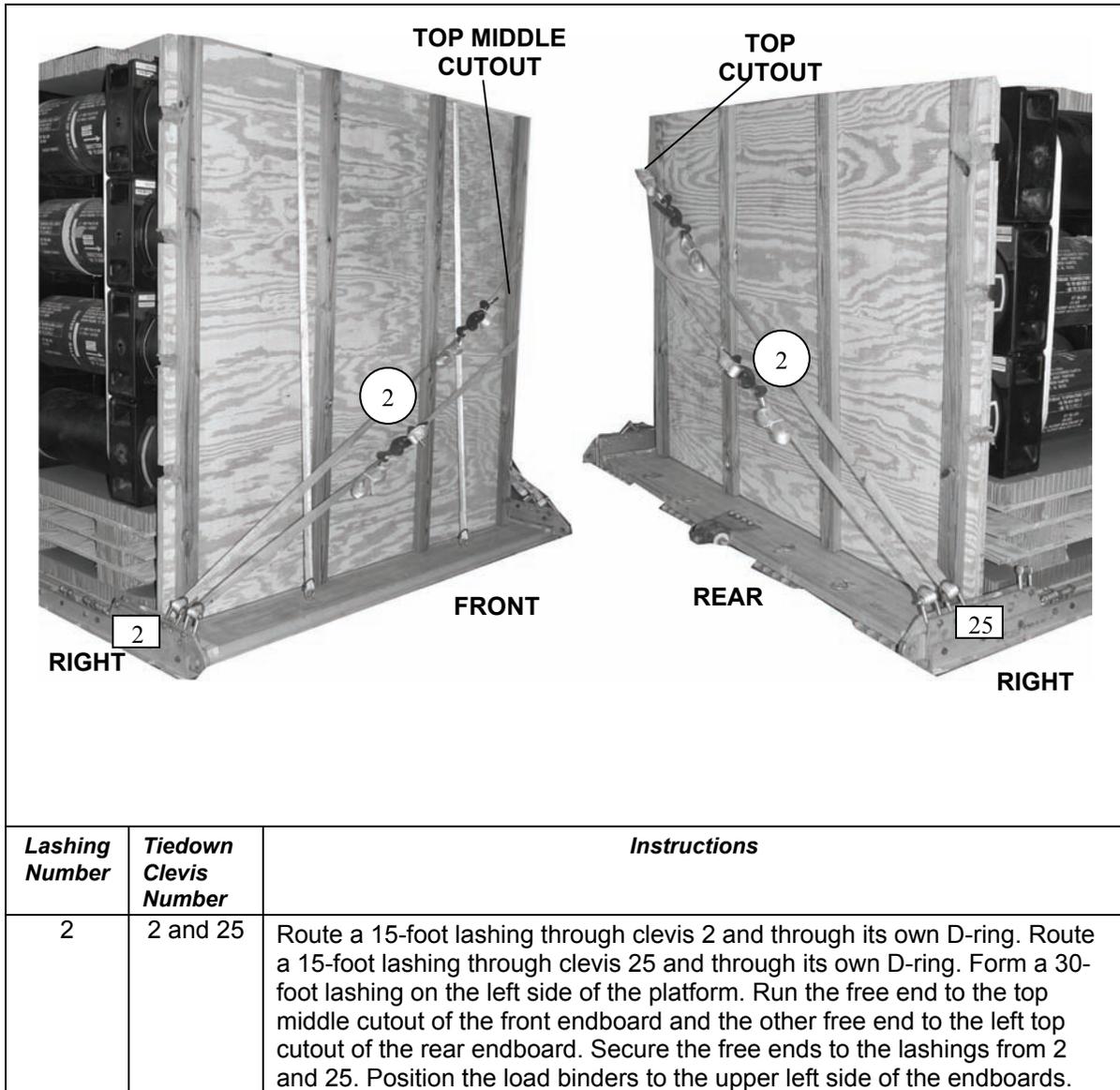
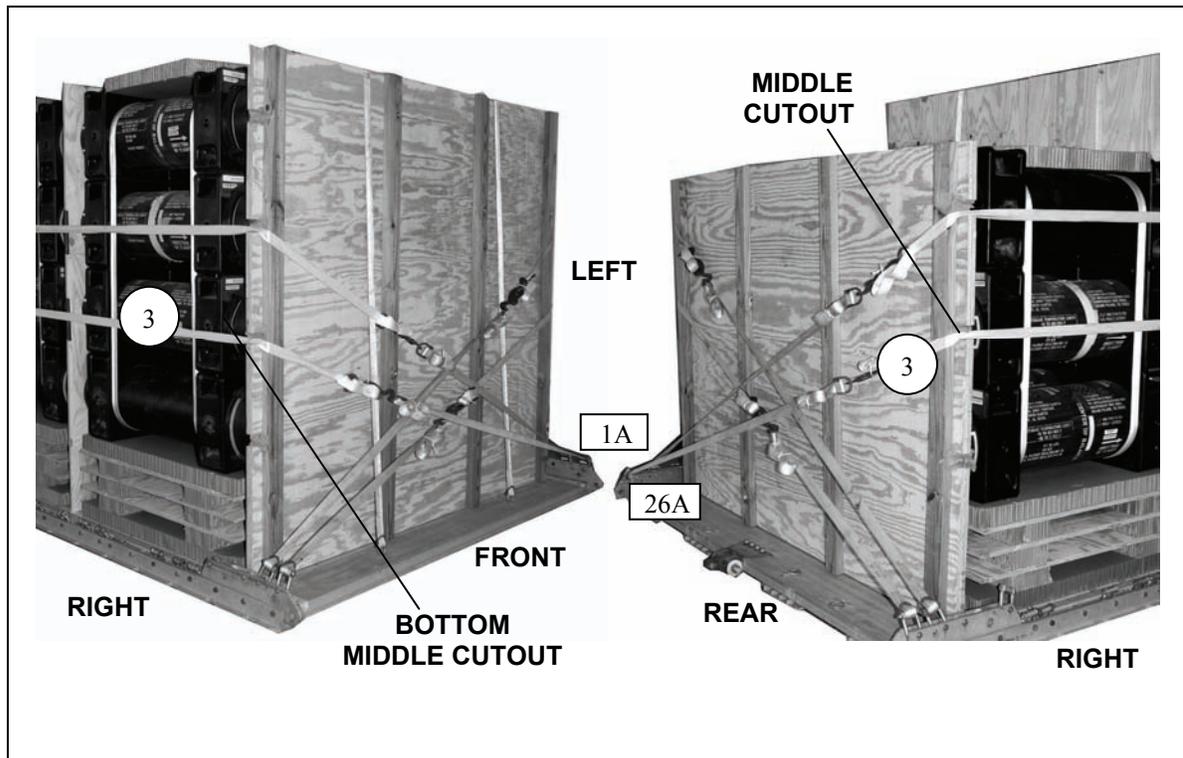
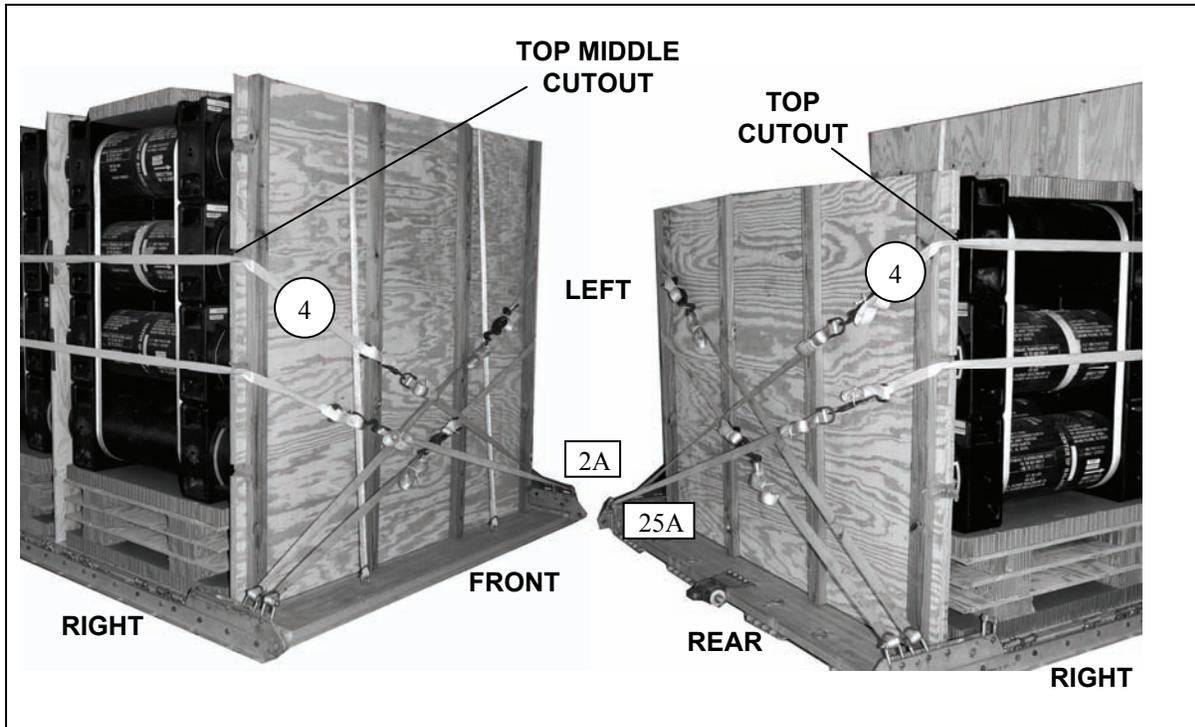


Figure 5-27. Load Lashed to Platform (Continued)



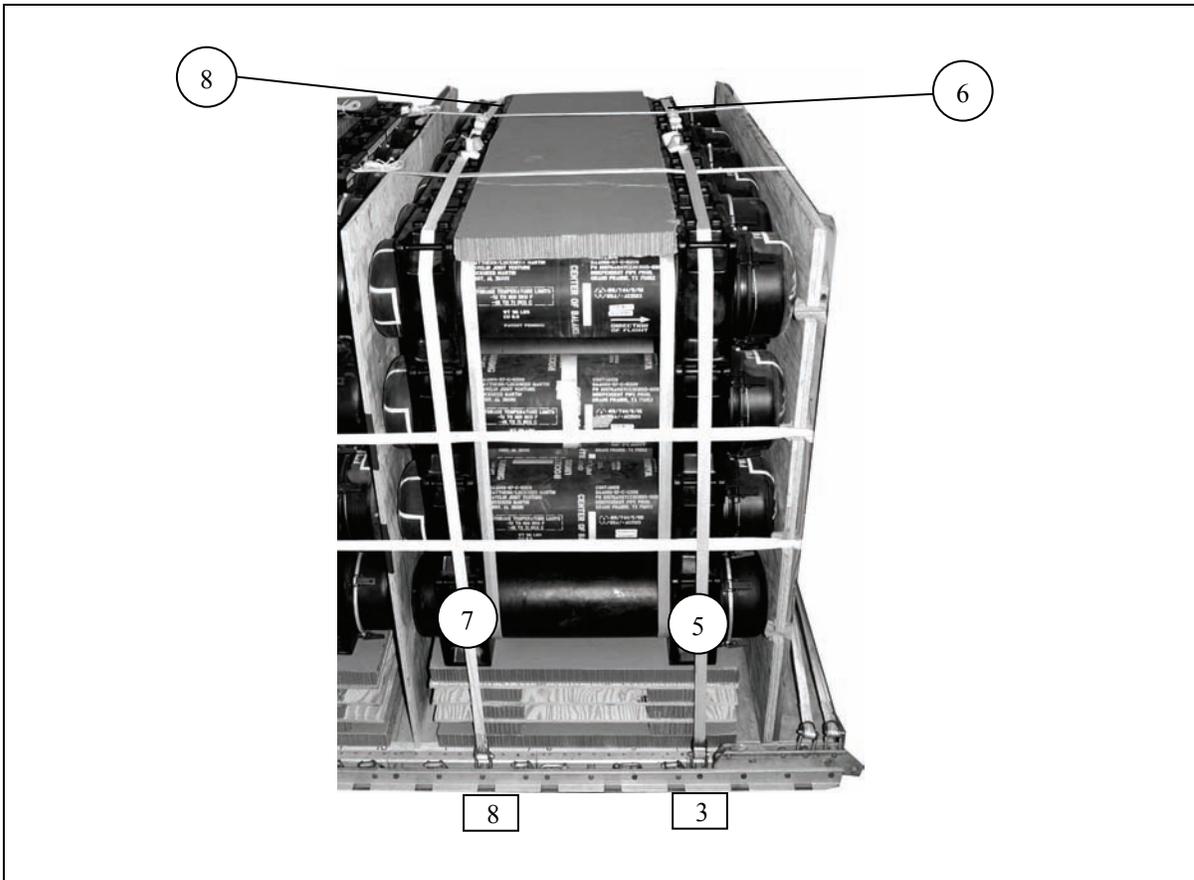
<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
3	1A and 26A	Route a 15-foot lashing through clevis 1A and through its own D-ring. Route a 15-foot lashing through clevis 26A and through its own D-ring. Form a 30-foot lashing on the right side of the platform. Run the free end to the bottom middle cutout of the front endboard and the other free end to the right middle cutout of the rear endboard. Secure the free ends to the lashings from 1A and 26A. Position the load binders to the right side of the endboards.

Figure 5-29. Load Lashed to Platform (Continued)



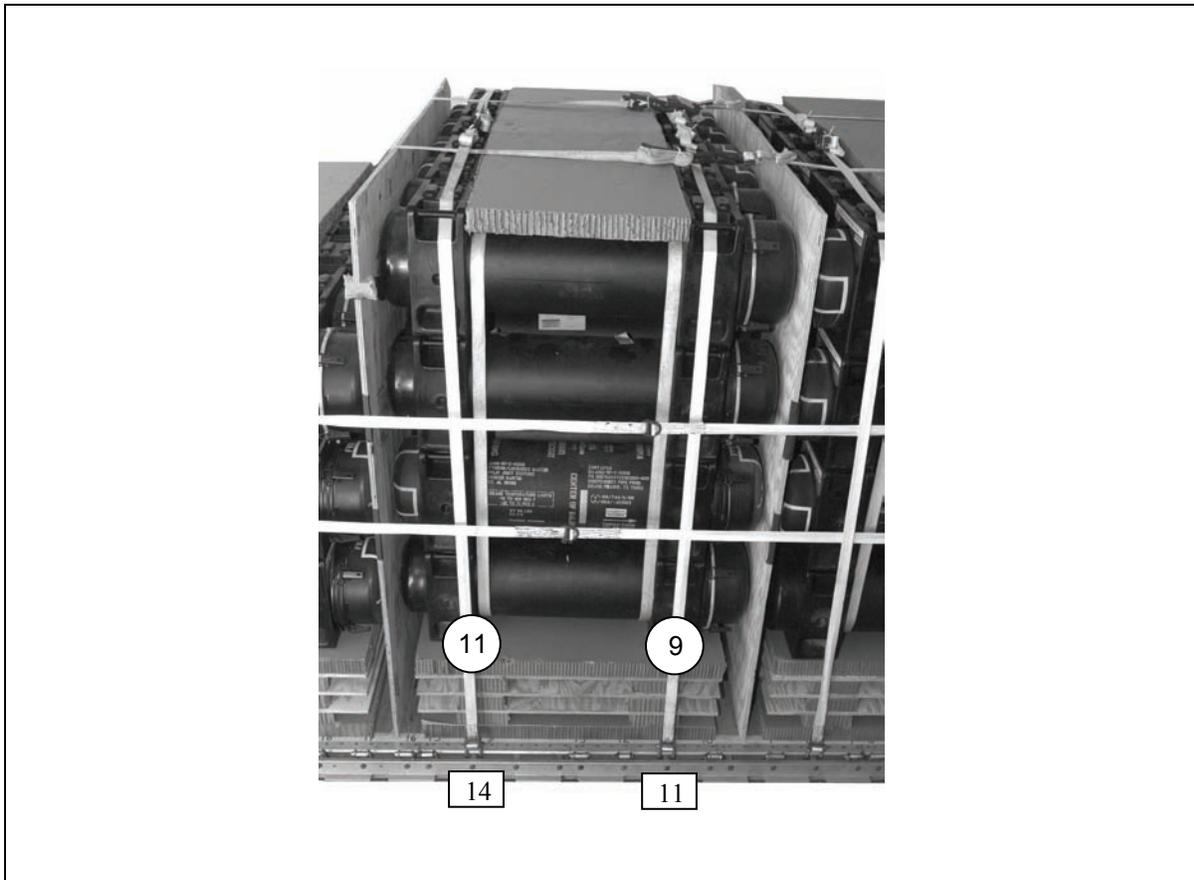
<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
4	2A and 25A	Route a 15-foot lashing through clevis 2A and through its own D-ring. Route a 15-foot lashing through clevis 25A and through its own D-ring. Form a 30-foot lashing on the right side of the platform. Run the free end to the top middle cutout of the front endboard and the other free end to the right top cutout of the rear endboard. Secure the free ends to the lashings from 2A and 25A. Position the load binders to the right side of the endboards.

Figure 5-29. Load Lashed to Platform (Continued)



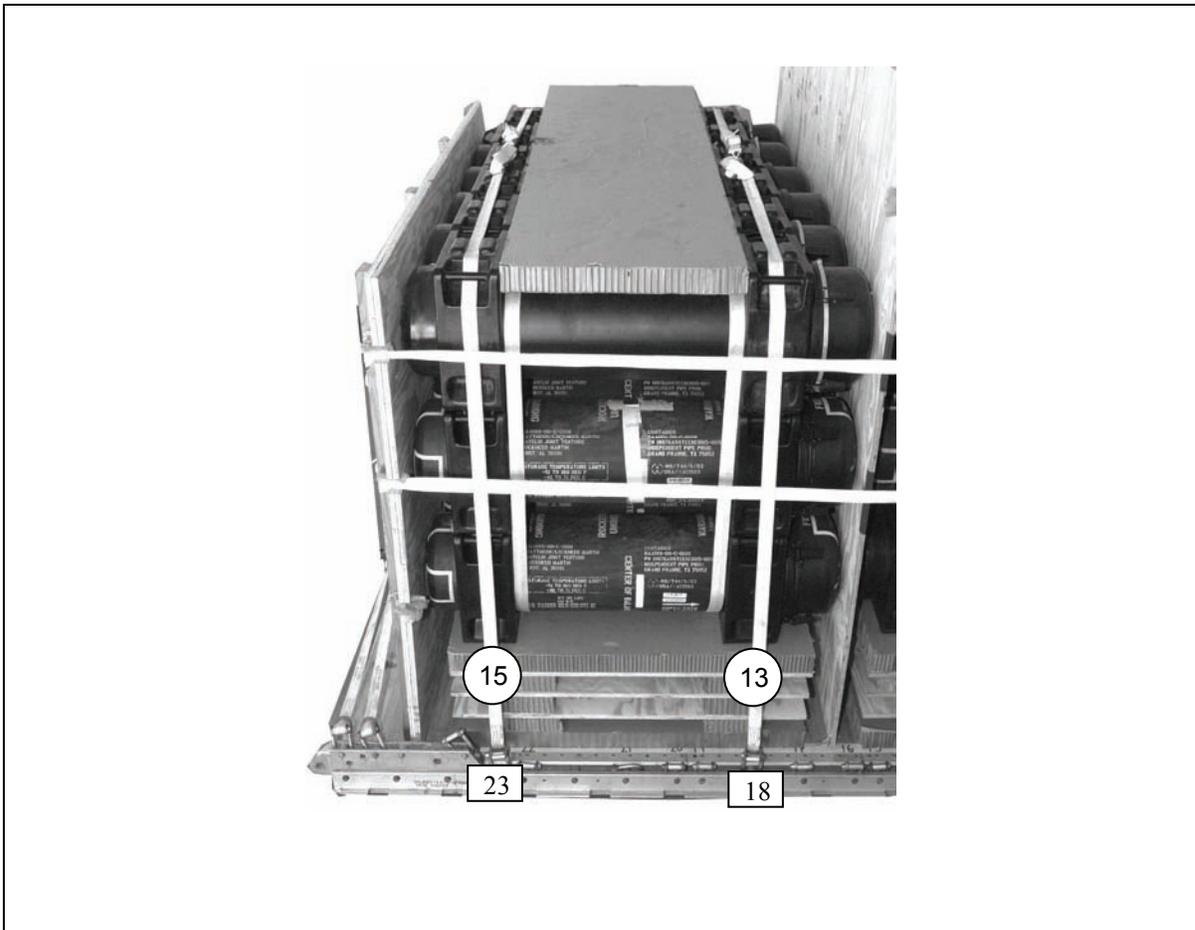
Lashing Number	Tiedown Clevis Number	Instructions
5	3	Route a 15-foot lashing through clevis 3 and through its own D-ring. Route the lashing upward through the top right front outside carrying handles of stack 1.
6	3A	Route a 15-foot lashing through clevis 3A and through its own D-ring. Route the lashing upward through the top left front outside carrying handles of stack 1. Secure the lashing to lashing 5 on the top front center of stack 1 with two D-rings and a load binder.
7	8	Route a 15-foot lashing through clevis 8 and through its own D-ring. Route the lashing upward through the top right rear outside carrying handles of stack 1.
8	8A	Route a 15-foot lashing through clevis 8A and through its own D-ring. Route the lashing upward through the top left rear outside carrying handles of stack 1. Secure the lashing to lashing 7 on the top rear center of stack 1 with two D-rings and a load binder.

Figure 5-29. Load Lashed to Platform (Continued)



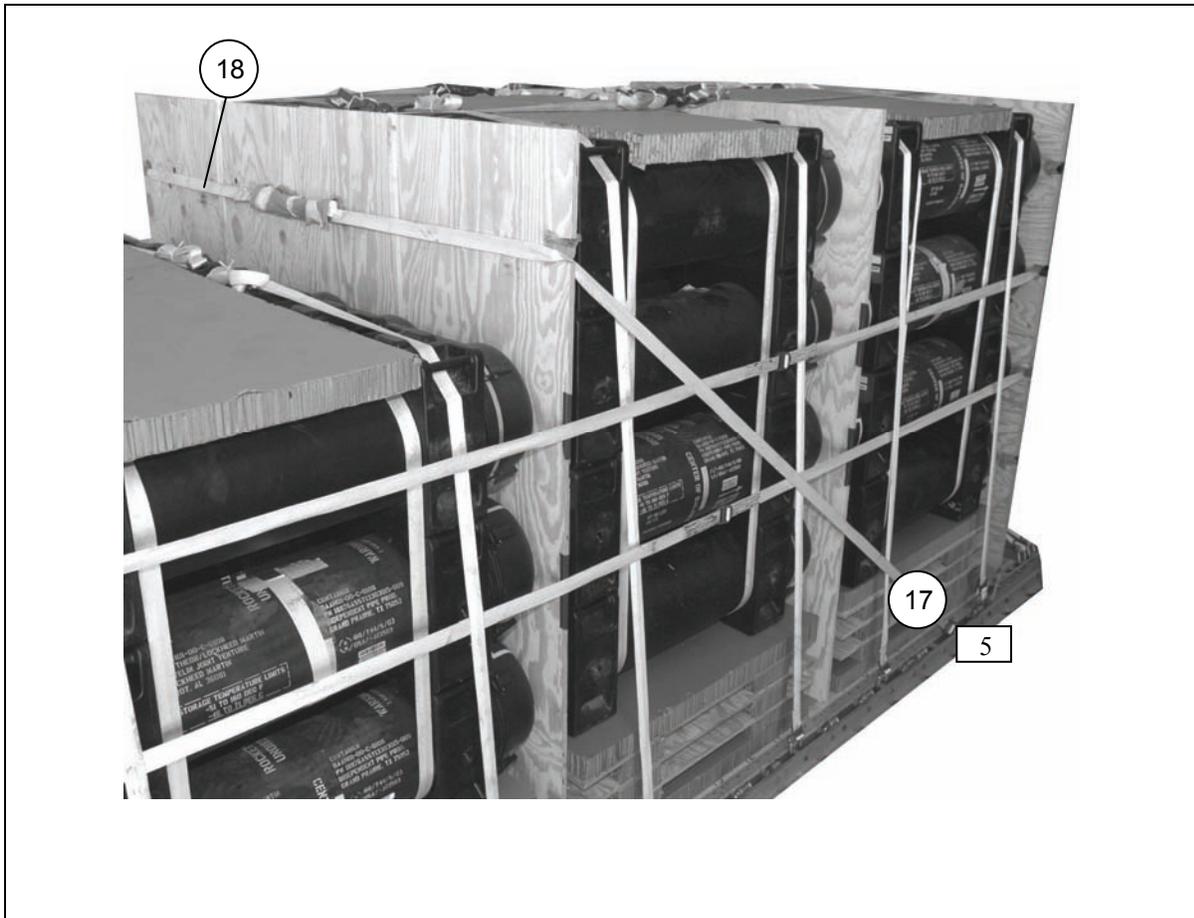
Lashing Number	Tiedown Clevis Number	Instructions
9	11	Route a 15-foot lashing through clevis 11 and through its own D-ring. Route the lashing upward through the top right front outside carrying handles of stack 2.
10	11A	Route a 15-foot lashing through clevis 11A and through its own D-ring. Route the lashing upward through the top left front outside carrying handles of stack 2. Secure the lashing to lashing 9 on the top front center of stack 2 with two D-rings and a load binder.
11	14	Route a 15-foot lashing through clevis 14 and through its own D-ring. Route the lashing upward through the top right rear outside carrying handles of stack 2.
12	14A	Route a 15-foot lashing through clevis 14A and through its own D-ring. Route the lashing upward through the top left rear outside carrying handles of stack 2. Secure the lashing to lashing 11 on the top rear center of stack 2 with two D-rings and a load binder.

Figure 5-29. Load Lashed to Platform (Continued)



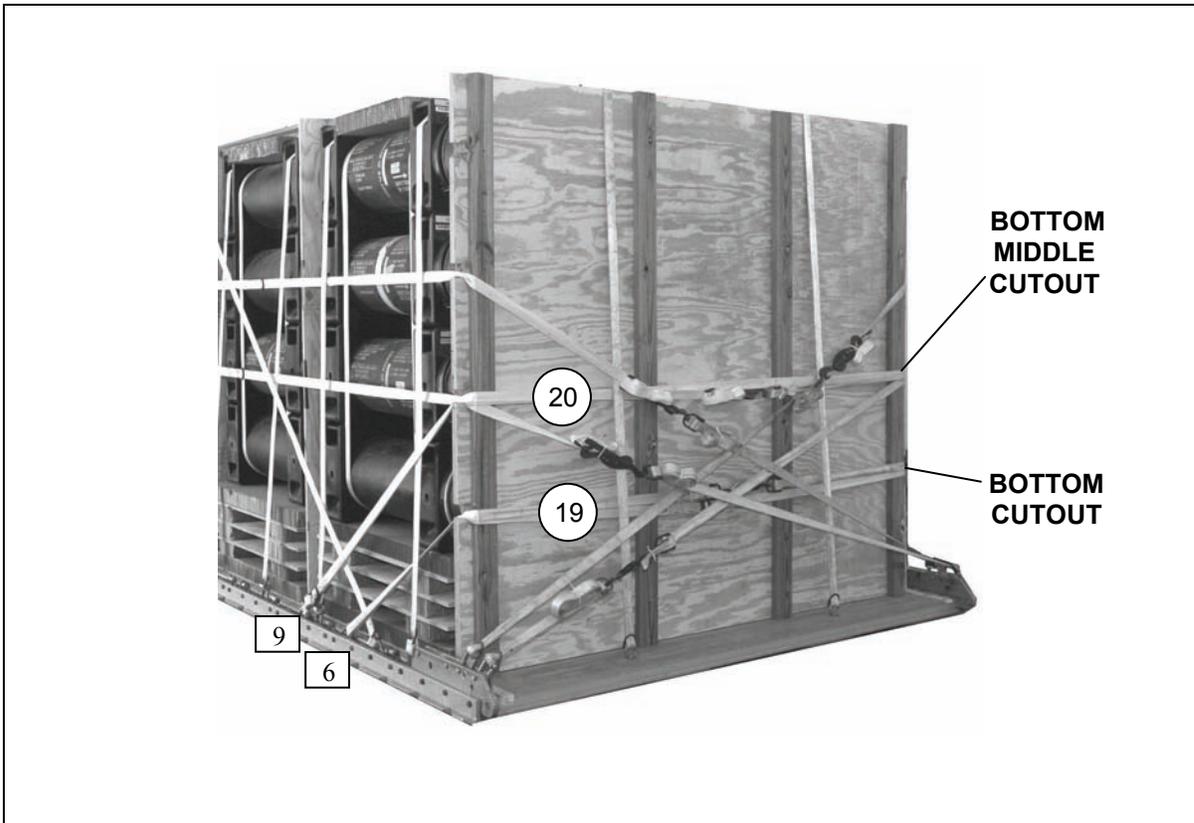
Lashing Number	Tiedown Clevis Number	Instructions
13	18	Route a 15-foot lashing through clevis 18 and through its own D-ring. Route the lashing upward through the top right front outside carrying handles of stack 3.
14	18A	Route a 15-foot lashing through clevis 18A and through its own D-ring. Route the lashing upward through the top left front outside carrying handles of stack 3. Secure the lashing to lashing 13 on the top front center of stack 3 with two D-rings and a load binder.
15	23	Route a 15-foot lashing through clevis 23 and through its own D-ring. Route the lashing upward through the top right rear outside carrying handles of stack 3.
16	23A	Route a 15-foot lashing through clevis 23A and through its own D-ring. Route the lashing upward through the top left rear outside carrying handles of stack 2. Secure the lashing to lashing 15 on the top rear center of stack 3 with two D-rings and a load binder.

Figure 5-29. Load Lashed to Platform (Continued)



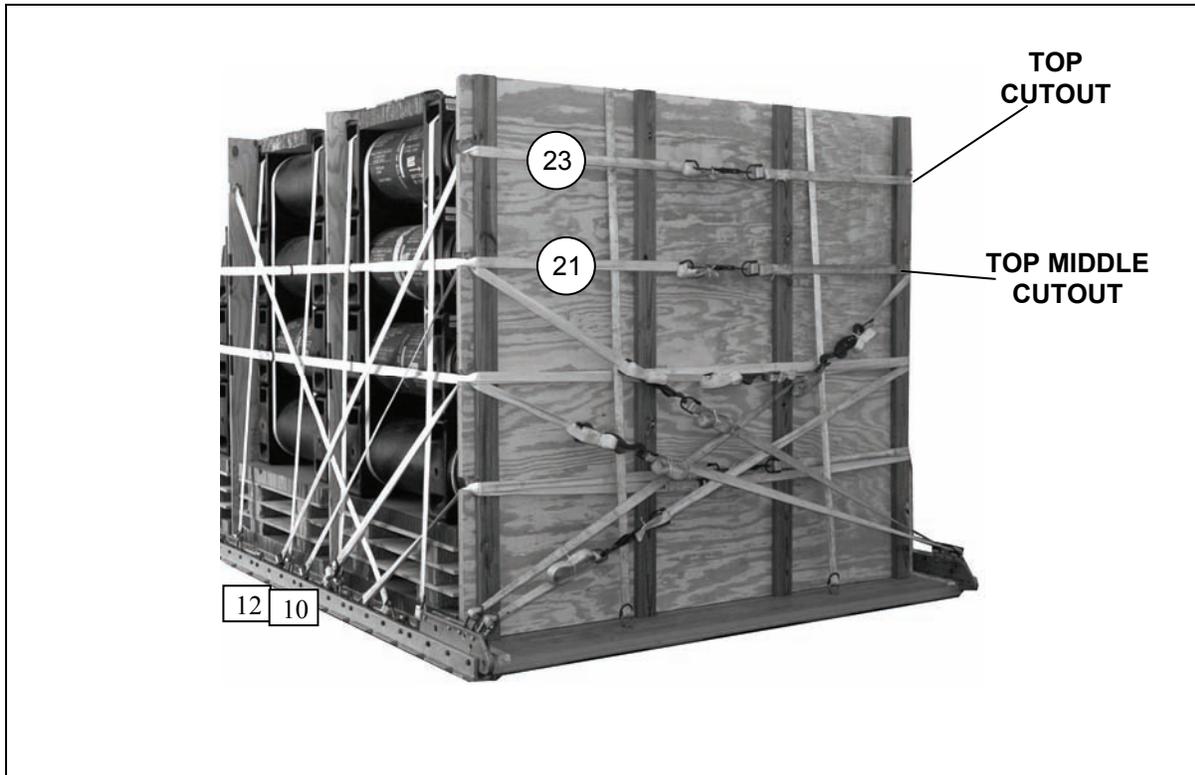
Lashing Number	Tiedown Clevis Number	Instructions
17	5	Route a 15-foot lashing through clevis 5 and through its own D-ring. Route the lashing through the cutout on the right side of the endboard to the rear of stack 2.
18	5A	Route a 15-foot lashing through clevis 5A and through its own D-ring. Route the lashing through the cutout on the left side of the endboard to the rear of stack 2. Secure the lashing to lashing 17 in the center of the endboard behind stack 2 with two D-rings and a load binder. Pad the load binder with cellulose wadding and tape.

Figure 5-29. Load Lashed to Platform (Continued)



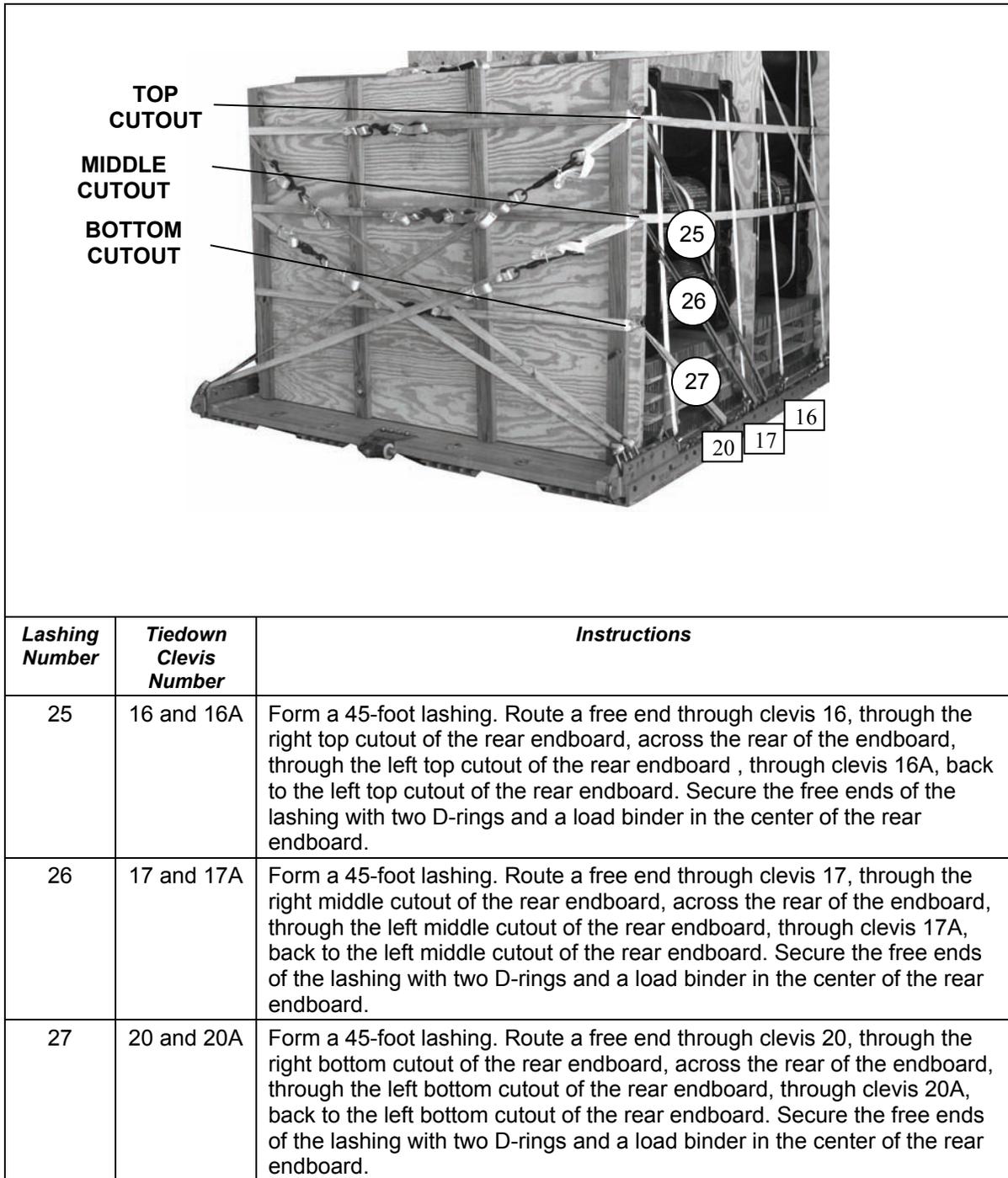
<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
19	6 and 6A	Form a 30-foot lashing. Route a free end through clevis 6, through the right bottom cutout of the front endboard, across the front of the endboard, through the left bottom cutout of the front endboard, through clevis 6A, back to the left bottom cutout of the front endboard. Secure the free ends of the lashing with two D-rings and a load binder in the center of the front endboard. Reposition load binders on lashing 1 from the front side of the load to the lower right side and from the rear side of the load to the upper left side.
20	9 and 9A	Form a 45-foot lashing. Route a free end through clevis 9, through the bottom middle cutout of the front endboard, across the front of the endboard, through the left bottom middle cutout of the front endboard, through clevis 9A, back through the bottom middle cutout of the front end board. Secure the free ends of the lashing with two D-rings and a load binder to the center of the front endboard.

Figure 5-29. Load Lashed to Platform (Continued)



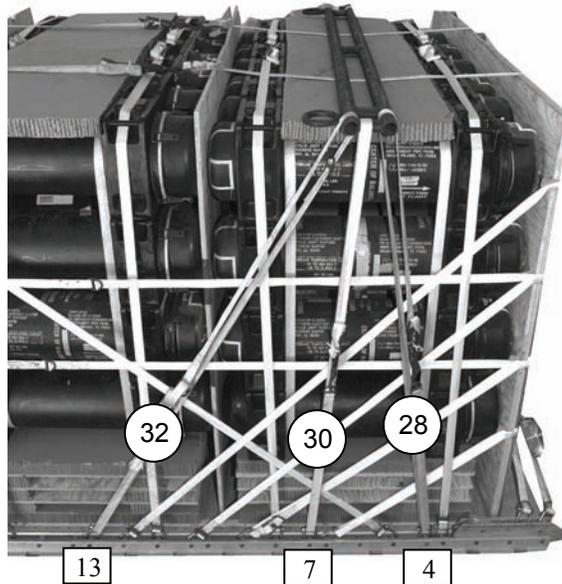
<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
21	10	Route a 15-foot lashing through clevis 10 and through its own D-ring. Route the lashing upward through the right top middle cutout of the front endboard.
22	10A	Route a 15-foot lashing through clevis 10A and through its own D-ring. Route the lashing to the left top middle cutout of the front endboard. Secure the lashing to lashing 21 in the center of the front endboard with two D-rings and a load binder.
23	12	Route a 15-foot lashing through clevis 12 and through its own D-ring. Route the lashing upward through the right top cutout of the front endboard.
24	12A	Route a 15-foot lashing through clevis 12A and through its own D-ring. Route the lashing to the left top cutout of the front endboard. Secure the lashing to lashing 23 in the center of the front endboard with two D-rings and a load binder.

Figure 5-29. Load Lashed to Platform (Continued)



<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
25	16 and 16A	Form a 45-foot lashing. Route a free end through clevis 16, through the right top cutout of the rear endboard, across the rear of the endboard, through the left top cutout of the rear endboard, through clevis 16A, back to the left top cutout of the rear endboard. Secure the free ends of the lashing with two D-rings and a load binder in the center of the rear endboard.
26	17 and 17A	Form a 45-foot lashing. Route a free end through clevis 17, through the right middle cutout of the rear endboard, across the rear of the endboard, through the left middle cutout of the rear endboard, through clevis 17A, back to the left middle cutout of the rear endboard. Secure the free ends of the lashing with two D-rings and a load binder in the center of the rear endboard.
27	20 and 20A	Form a 45-foot lashing. Route a free end through clevis 20, through the right bottom cutout of the rear endboard, across the rear of the endboard, through the left bottom cutout of the rear endboard, through clevis 20A, back to the left bottom cutout of the rear endboard. Secure the free ends of the lashing with two D-rings and a load binder in the center of the rear endboard.

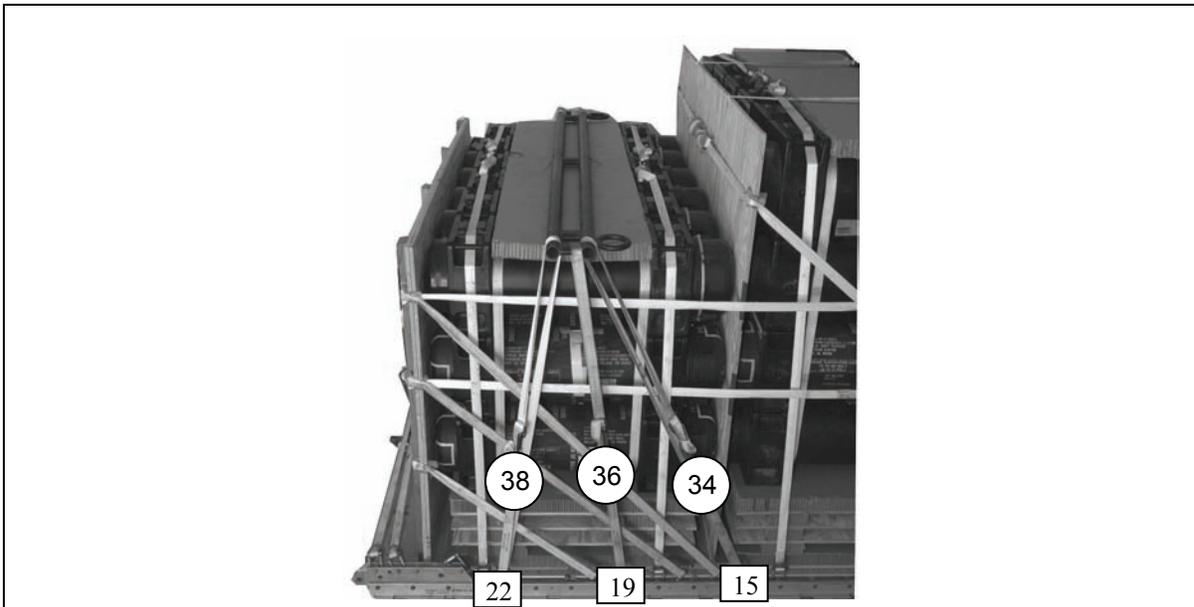
Figure 5-29. Load Lashed to Platform (Continued)

**Step:**

1. Position the ACB on top of the honeycomb on stack 1 with the rings of the ACB facing toward the rear of the load.

Lashing Number	Tiedown Clevis Number	Instructions
28	4	Route a 15-foot lashing through clevis 4, upward through the front bar of the front ACB, and back to clevis 4. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
29	4A	Route a 15-foot lashing through clevis 4A, upward through the front bar of the front ACB, and back to clevis 4A. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
30	7	Route a 15-foot lashing through clevis 7, upward through the middle portion of the front ACB, and back to clevis 7. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
31	7A	Route a 15-foot lashing through clevis 7A, upward through the middle portion of the front ACB, and back to clevis 7A. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
32	13	Form a 30-foot lashing. Route a 30-foot lashing through clevis 13, upward through the rear bar of the front ACB, and back to clevis 13. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
33	13A	Form a 30-foot lashing. Route a 30-foot lashing through clevis 13A, upward through the rear bar of the front ACB, and back to clevis 13A. Attach a D-ring and load binder. TIGHTEN all lashings at this time.

Figure 5-29. Load Lashed to Platform (Continued)



Step:

2. Position the ACB centered on top of the honeycomb on stack 3 with the rings of the ACB facing toward the front of the load.

Lashing Number	Tiedown Clevis Number	Instructions
34	15	Route a 15-foot lashing through clevis 15, upward through the front bar of the rear ACB, and back to clevis 15. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
35	15A	Route a 15-foot lashing through clevis 15A, upward through the front bar of the rear ACB, and back to clevis 15A. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
36	19	Route a 15-foot lashing through clevis 19, upward through the middle portion of the rear ACB, and back to clevis 19. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
37	19A	Route a 15-foot lashing through clevis 19A, upward through the middle portion of the rear ACB, and back to clevis 19A. Attach a D-ring and a load binder. DO NOT TIGHTEN at this time.
38	22	Route a 15-foot lashing through clevis 22, upward through the rear bar of the rear ACB, and back to clevis 22. Attach a D-ring and load binder. DO NOT TIGHTEN at this time.
39	22A	Route a 15-foot lashing through clevis 22A, upward through the rear bar of the rear ACB, and back to clevis 22A. Attach a D-ring and load binder. TIGHTEN all lashings at this time.

Figure 5-29. Load Lashed to Platform (Continued)

BUILDING AND LASHING PARACHUTE PLATFORM TO LOAD

5-35. Build and lash the parachute platform to the load as shown in Figure 5-30.

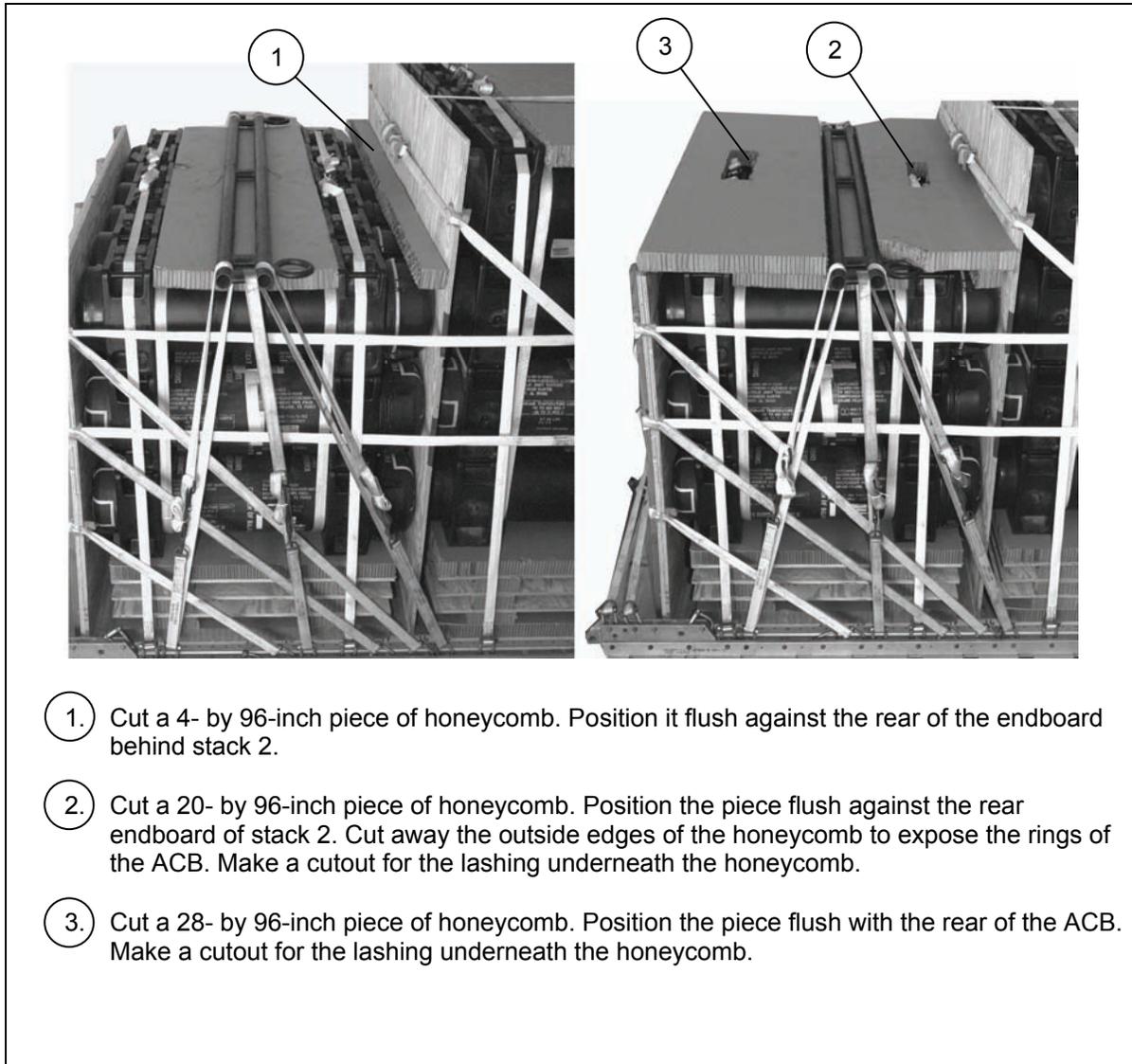
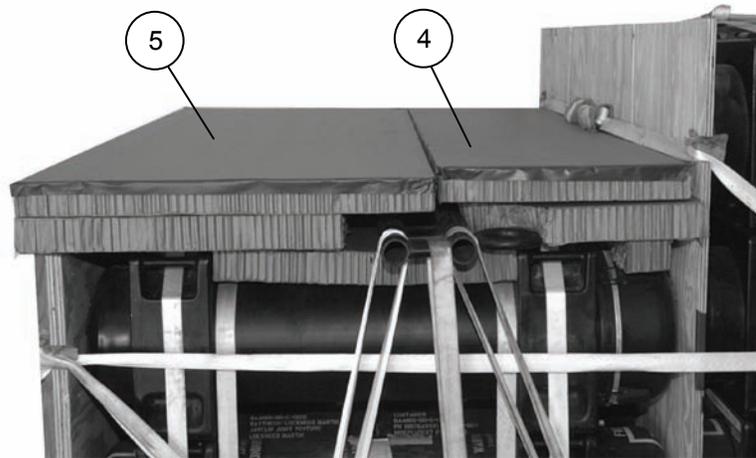
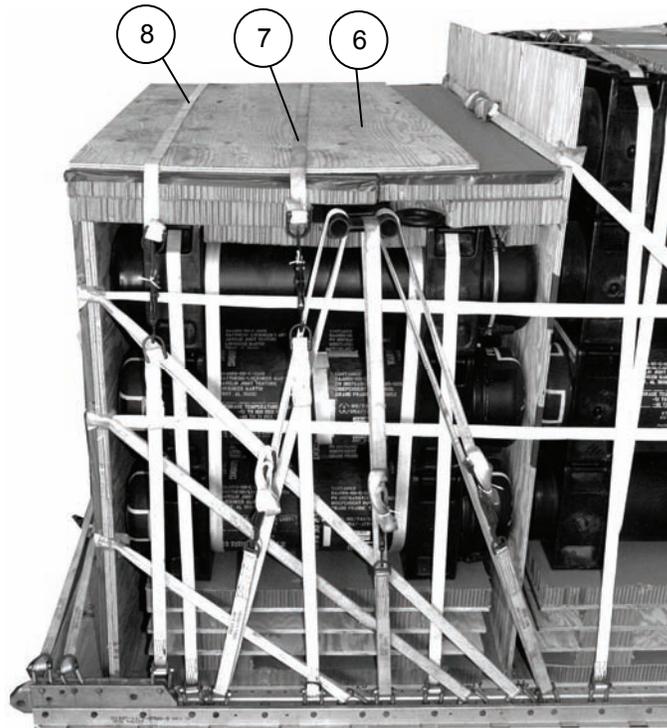


Figure 5-30. Parachute Platform Built and Lashed to Load



4. Cut a 22- by 96-inch piece of honeycomb. Tape the outside edge with 2-inch adhesive tape. Position it flush against the rear endboard of stack 2.
5. Place a 36- by 96-inch piece of honeycomb flush against the 22- by 96-inch piece of honeycomb after taping the outside edge with 2-inch adhesive tape.

Figure 5-30. Parachute Platform Built and Lashed to Load (Continued)

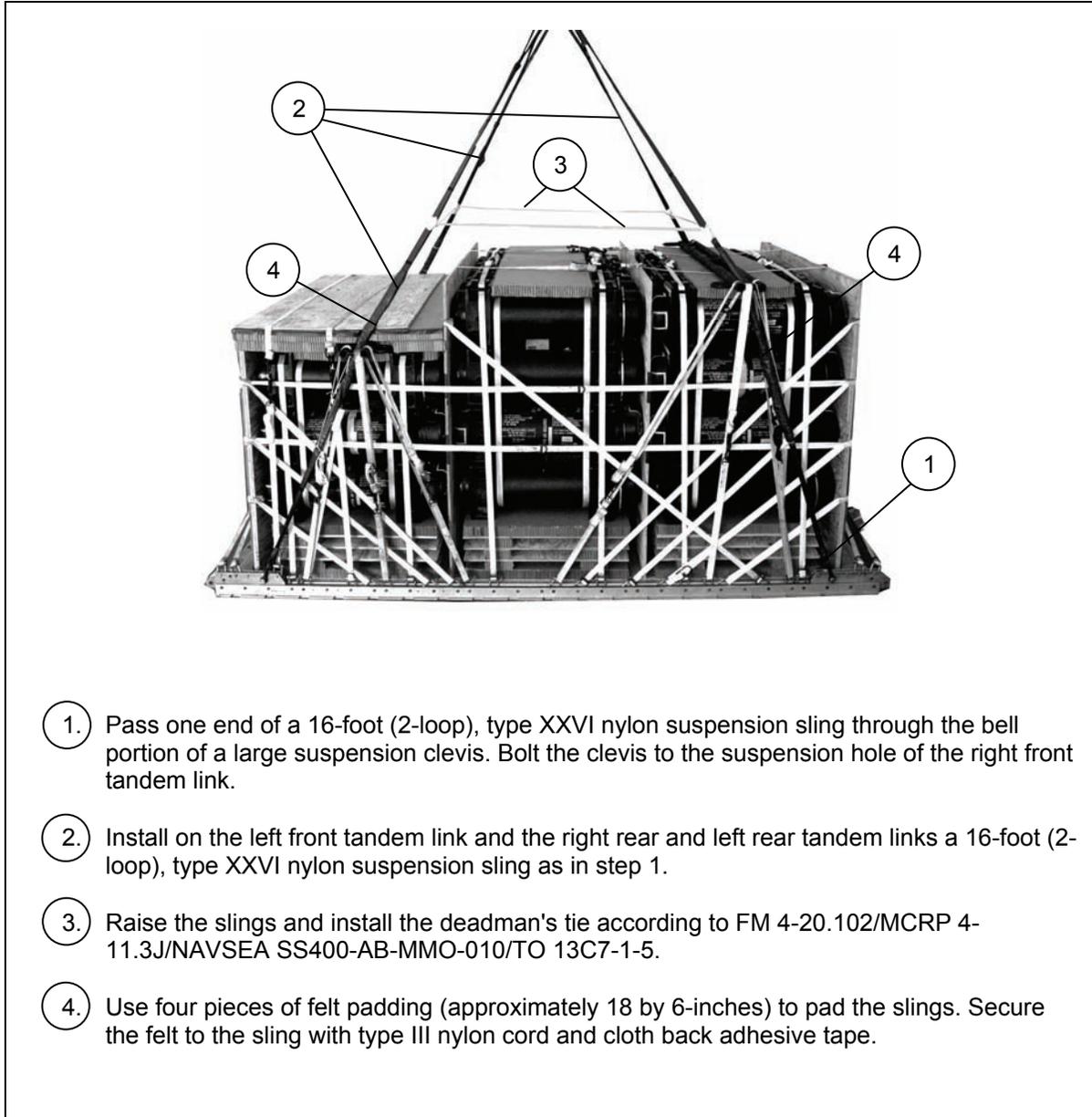


6. Position a 3/4- by 48- by 96-inch piece of plywood on top of the honeycomb installed. Make sure that the rear edge of the plywood is flush with the rear edge of the rear endboard.
7. Route a 15-foot lashing through clevis 21A and through its own D-ring. Continue to route the lashing over the top of the 48- by 96-inch piece of plywood to the right side of the platform. Route a 15-foot lashing through clevis 21 and through its own D-ring. Attach the lashing from clevis 21 and 21A together on the right side of the load with two D-rings and a load binder.
8. Route a 15-foot lashing through clevis 24A and through its own D-ring. Continue to route the lashing over the top of the 48- by 96-inch piece of plywood to the right side of the platform. Route a 15-foot lashing through clevis 24 and through its own D-ring. Attach the lashing from clevis 24 and 24A together on the right side of the load with two D-rings and a load binder.

Figure 5-30. Parachute Platform Built and Lashed to Load (Continued)

INSTALLING SUSPENSION SLINGS AND DEADMAN'S TIE

5-36. Install the suspension slings and deadman's tie as shown in Figure 5-31.



1. Pass one end of a 16-foot (2-loop), type XXVI nylon suspension sling through the bell portion of a large suspension clevis. Bolt the clevis to the suspension hole of the right front tandem link.
2. Install on the left front tandem link and the right rear and left rear tandem links a 16-foot (2-loop), type XXVI nylon suspension sling as in step 1.
3. Raise the slings and install the deadman's tie according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.
4. Use four pieces of felt padding (approximately 18 by 6-inches) to pad the slings. Secure the felt to the sling with type III nylon cord and cloth back adhesive tape.

Figure 5-31. Suspension Slings and Deadman's Tie Installed

PREPARING AND STOWING CARGO PARACHUTES

5-37. Prepare and stow the cargo parachutes as shown in Figure 5-32.

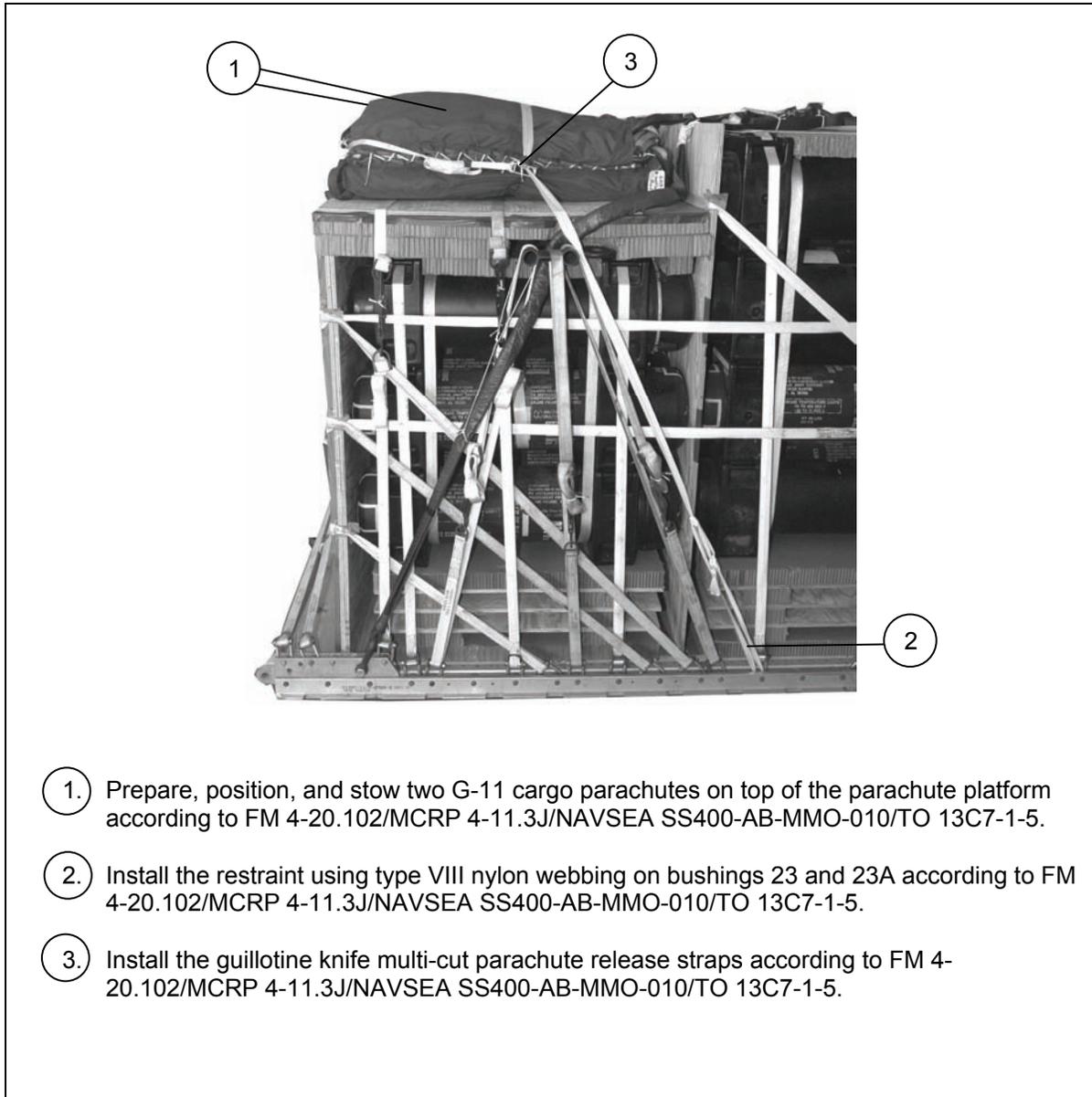
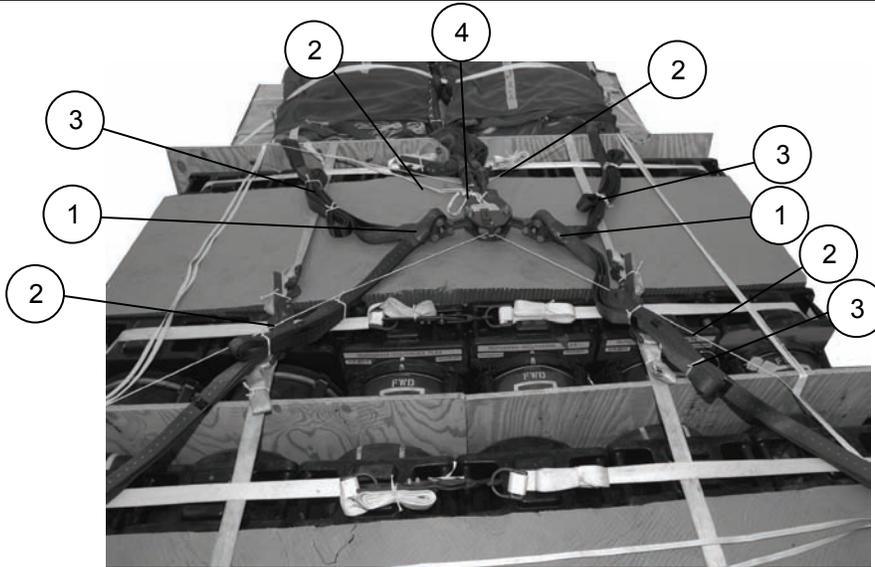


Figure 5-32. Cargo Parachutes Prepared and Stowed

INSTALLING THE RELEASE SYSTEM

5-38. Prepare, attach, and safety an M-1 cargo parachute release according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 5-33.



1. Prepare and install the M-1 cargo parachute release on top of the honeycomb on stack 2. Attach the suspension slings and riser extensions according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.
2. Safety the top and bottom of the release to convenient places on the load with type III nylon cord according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.
3. S-fold and tie any excess suspension slings with one turn of type I, 1/4-inch cotton webbing.
4. Tie the arming wire lanyard to the parachute carrying handles and fold and tape the excess.

Figure 5-33. Cargo Parachute Release Installed

INSTALLING THE EXTRACTION SYSTEM

5-39. Install the extraction system as shown in Figure 5-34.

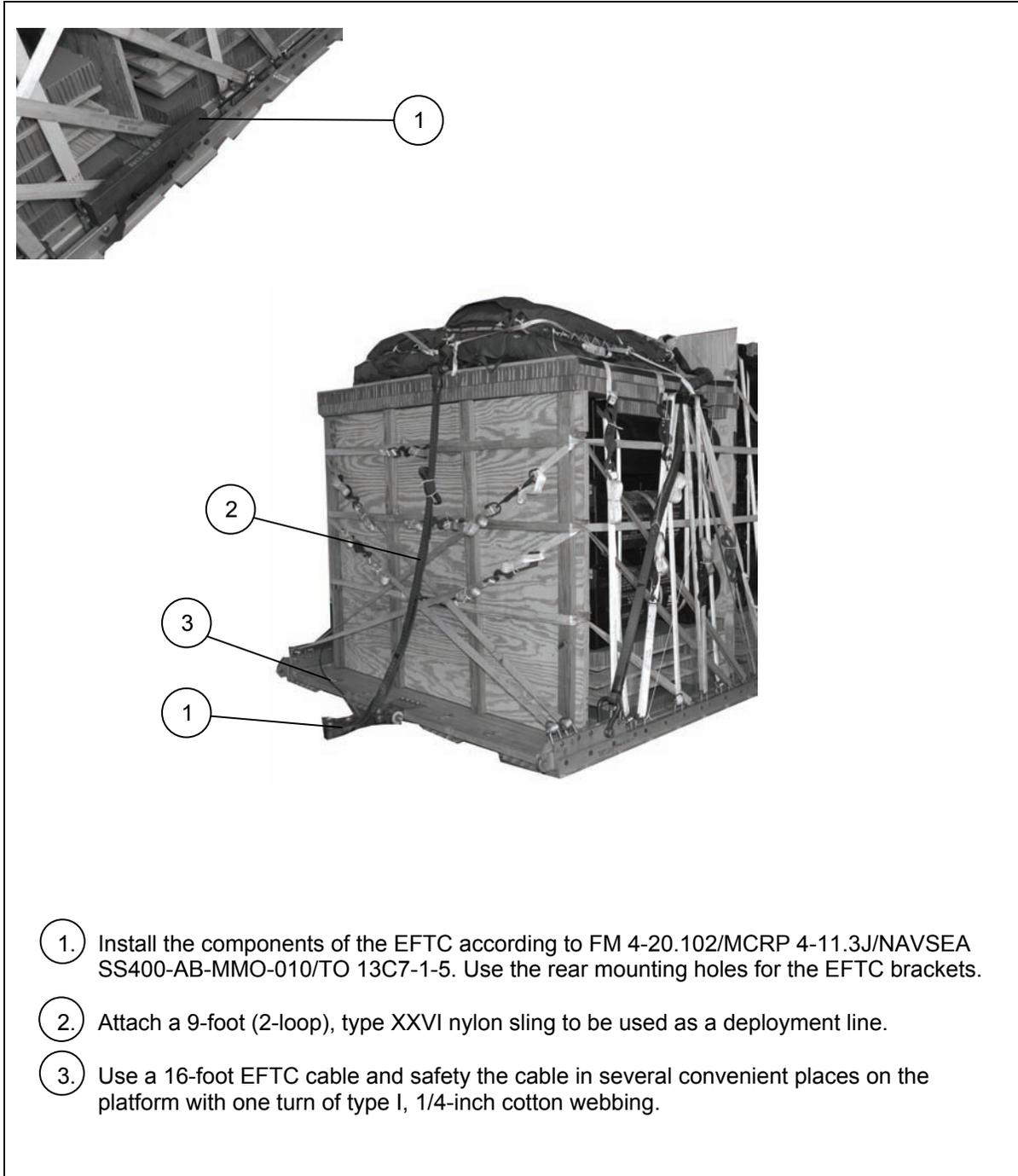


Figure 5-34. Extraction System Installed

PLACING EXTRACTION PARACHUTE

5-40. Select the extraction parachute and extraction line needed using the extraction line requirements table in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Place the extraction parachute and line on the load for installation in the aircraft.

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

5-41. Select and install the provisions for the emergency aft restraints according to the emergency aft restraint requirements table in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

MARKING RIGGED LOAD

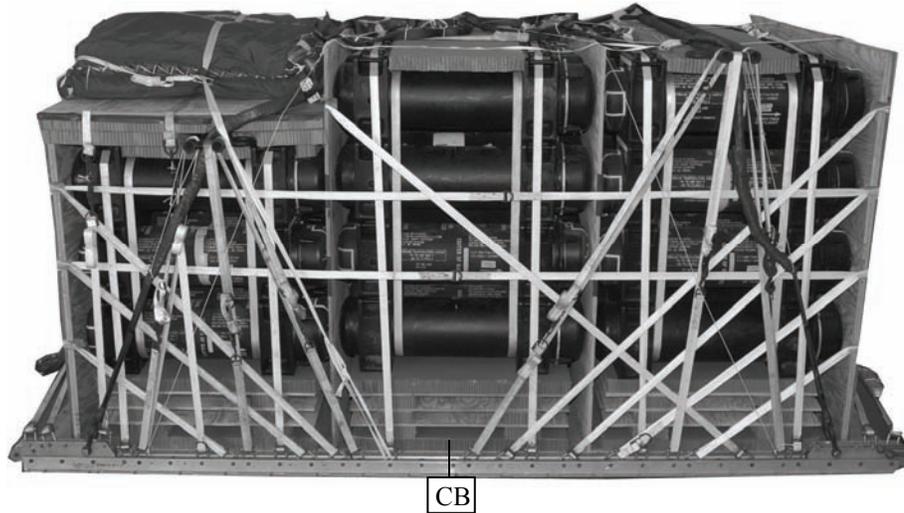
5-42. Mark the rigged load according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 5-35. Complete Declaration for Dangerous Goods. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

EQUIPMENT REQUIRED

5-43. Use the equipment listed in Table 5-2 to rig this load.

CAUTION

Make the final rigger inspection required by AR 59-4 and FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 before the load leaves the rigging site.



RIGGED LOAD DATA

Weight: Load shown	10,380 pounds
Height	94 inches
Width.....	108 inches
Overall Length	192 inches
Overhang: Front	0 inches
Rear	0 inches
Center of Balance (from front edge of the platform).....	94 inches
Extraction System with 16-foot cable (adds 18 inches to length of platform)	EFTC

Figure 5-35. Javelin Missile Containers (Plastic) Rigged on a 16-Foot, Type V Platform for Low-Velocity Airdrop

Table 5-2. Equipment Required for Rigging Javelin Missile Containers on a 16-Foot, Type V Platform for Low-Velocity Airdrop

<i>National Stock Number</i>	<i>Item</i>	<i>Quantity</i>
8040-00-273-8713	Adhesive, paste, 1-gallon	As required
1670-00-003-4389	Bar, attitude control	2
	Clevis, suspension:	
4030-00-678-8562	3/4-inch (medium) emergency restraint	4
4030-00-090-5354	1-inch (large)	6
4020-00-240-2146	Cord, nylon, type III	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer with 16-foot cable	1
1670-00-360-0328	Cover, clevis, large	2
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
1670-01-183-2678	Leaf, extraction line	2
	Line, extraction, type XXVI nylon webbing:	
1670-01-062-6313	60-foot (3-loop)	1
	Or	
1670-01-107-7651	140-foot (3-loop)	2
1670-01-064-4452	60-foot (1-loop), type XXVI for C-17 drogue line	1
	Link assembly, two-point:	
5306-00-435-8994	Bolt, 1-inch diameter, 4-inch long	1
5310-00-232-5165	Nut, 1-inch, hexagonal	1
1670-00-003-3454	Plate, side 3 3/4-inch	1
5365-00-007-3414	Spacer, large	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb	10 sheets
	Parachute:	
1670-01-016-7841	Cargo, G-11B	2
1670-01-063-3716	Cargo, extraction, 22-foot	1
	Platform, airdrop, type V, 16-foot	
1670-01-353-8425	Bracket assembly, EFTC	1
1670-01-162-2372	Bracket assembly, extraction	1
1670-01-162-2376	Clevis assembly	34
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-inch	10 sheets
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 5-2. Equipment Required for Rigging Javelin Missile Containers on a 16-Foot, Type V Platform for Low-Velocity Airdrop (Continued)

<i>National Stock Number</i>	<i>Item</i>	<i>Quantity</i>
	Sling, cargo airdrop:	
	For deployment line:	
1670-01-063-7761	16-foot (3-loop), type XXVI nylon webbing	1
1670-01-062-6304	For lifting:	
1670-01-063-7760	9-foot (2-loop), type XXVI nylon webbing	2
	11-foot (2-loop), type XXVI nylon webbing	2
1670-01-062-6302	For riser extension:	
	20-foot (2-loop), type XXVI nylon webbing	2
1670-01-063-7761	For suspension:	
1670-00-040-8219	16-foot (2-loop), type XXVI nylon webbing	4
7515-00-266-5016	Strap parachute release, multicut	2
1670-00-937-0271	Tape, adhesive, 2-inch	As required
7501-00-266-6710	Tape, masking	As required
	Tie-down assembly, 15-foot	34
8305-00-268-2411	Webbing:	
	Cotton, 1/4-inch, type I	As required
8305-00-082-5752	Nylon:	
8305-00-263-3591	Tubular, 1/2-inch	As required
	Type VIII webbing	As required

Glossary

ACB	Attitude control bar
AD	Airdrop
AFB	Air Force Base
AFMAN	Air Force manual
AFR	Air Force Regulation
AFTO	Air Force technical order
AR	Army Regulation
attn	attention
BCU	battery coolant unit
CB	center of balance
cap	capacity
CDS	Container delivery system
chap	chapter
CVRS	Centerline Vertical Restraint System
d	penny
DA	Department of the Army
DC	District of Columbia
DD	Department of Defense
diam	diameter
EFTC	extraction force transfer coupling
FM	field manual
HQ	headquarters
IAW	in accordance with
in	inch
lb	pound
LVAD	low-velocity airdrop
MCRP	Marine Corps Reference Publication
mm	millimeter
NAVSEA	Naval Sea Systems Command
no	number
NSN	national stock number
sec	second
TM	technical manual
TO	technical order
TRADOC	United States Army Training and Doctrine Command
w	with
yd	yard

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FM 4-20.152 (FM 10-552)
TO 13C7-22-61
6 September 2007

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