

Figure 5-54. Pre-positioned Lashings Secured

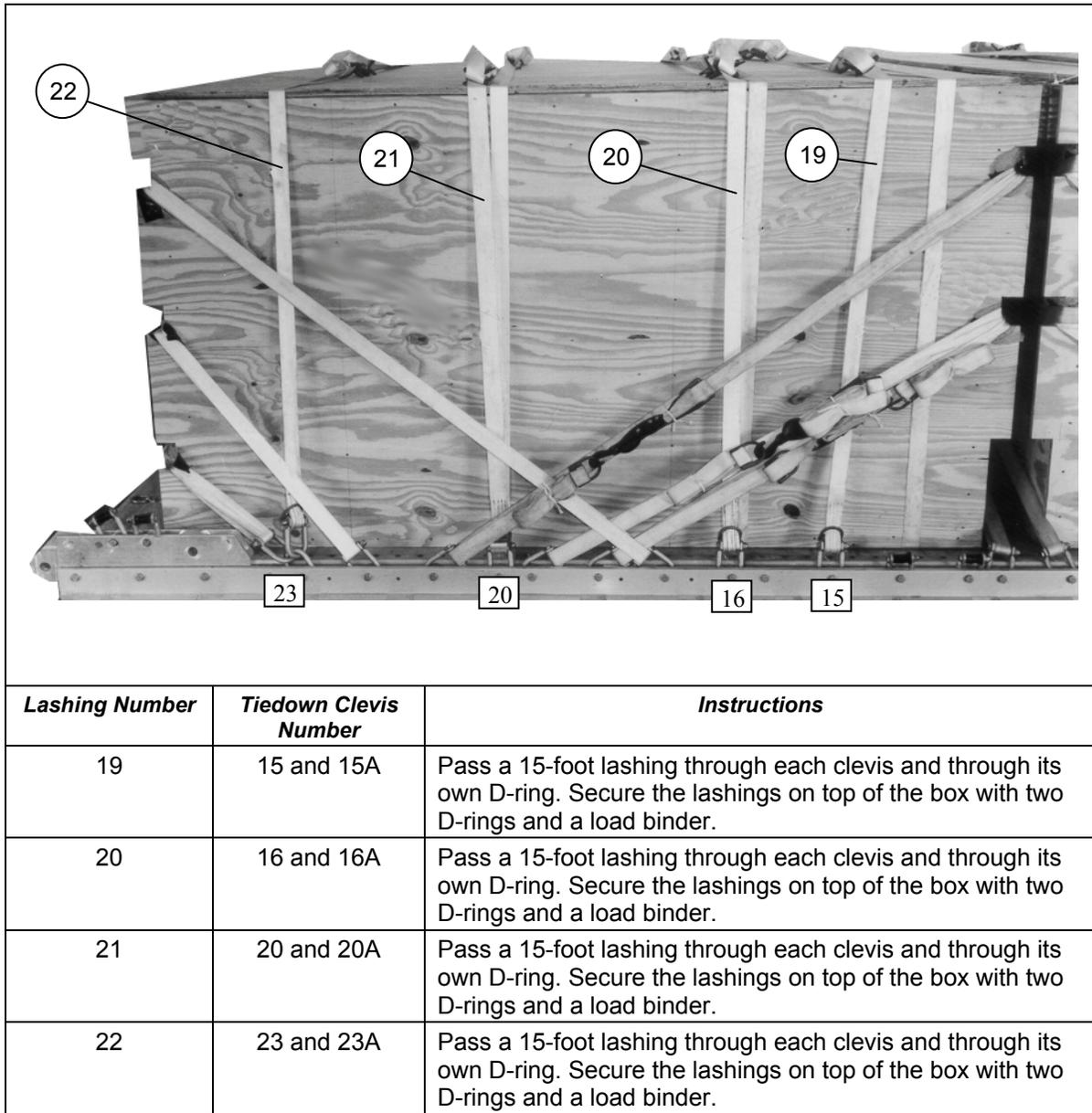
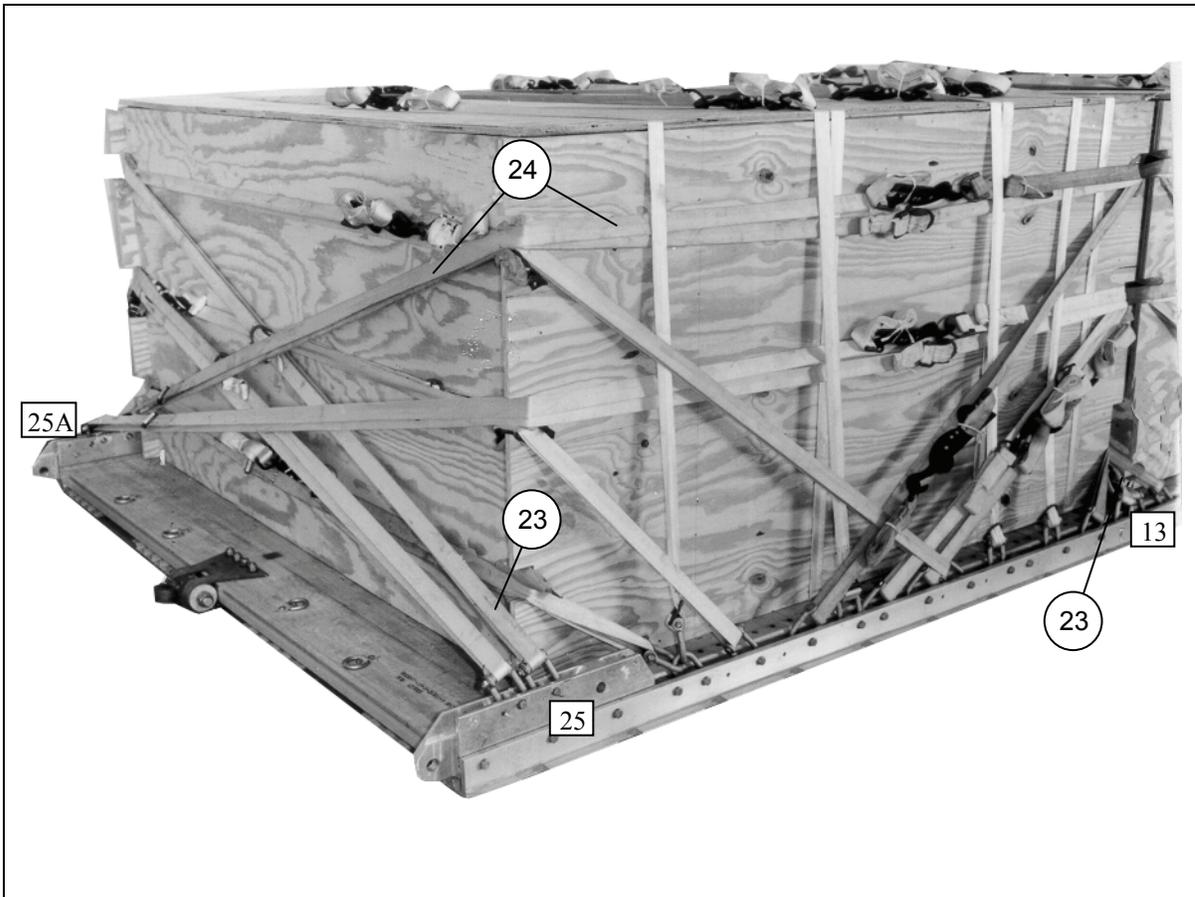
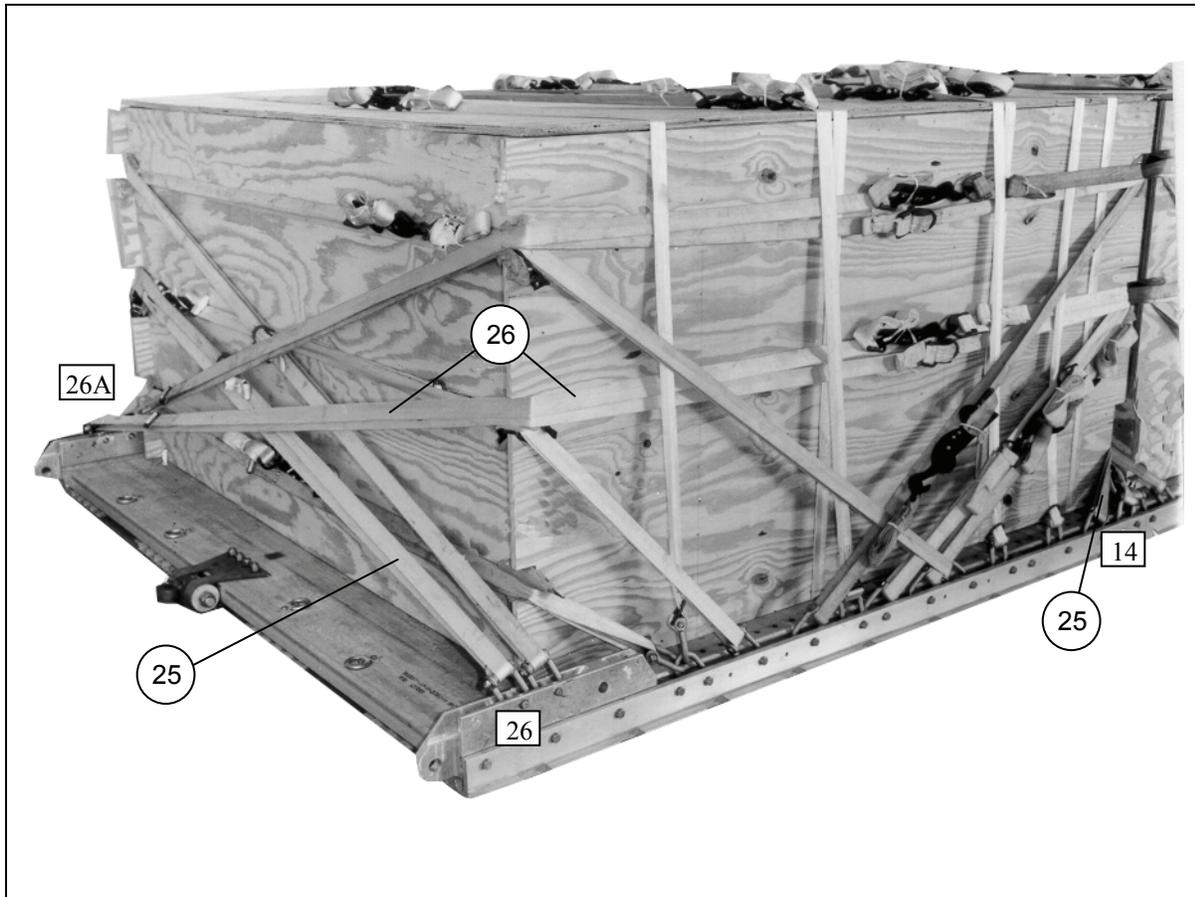


Figure 5-55. Lashings 19 Through 22 Installed



<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
23	13 and 25	Pass a 60-foot lashing through clevis 13, through the top cutout in the left side of the second box and around the left side of the box. Pass the lashing through the top left cutout on the rear side of the second box and through clevis 25. Secure the lashing on the left side with two D-rings and a load binder.
24	13A and 25A	Pass a 60-foot lashing through clevis 13A, through the top cutout in the right side of the second box, and around the right side of the box. Pass the lashing through the top right cutout on the rear side of the second box and through clevis 25A. Secure the lashing on the right side with two D-rings and a load binder.

Figure 5-56. Lashings 23 and 24 Installed

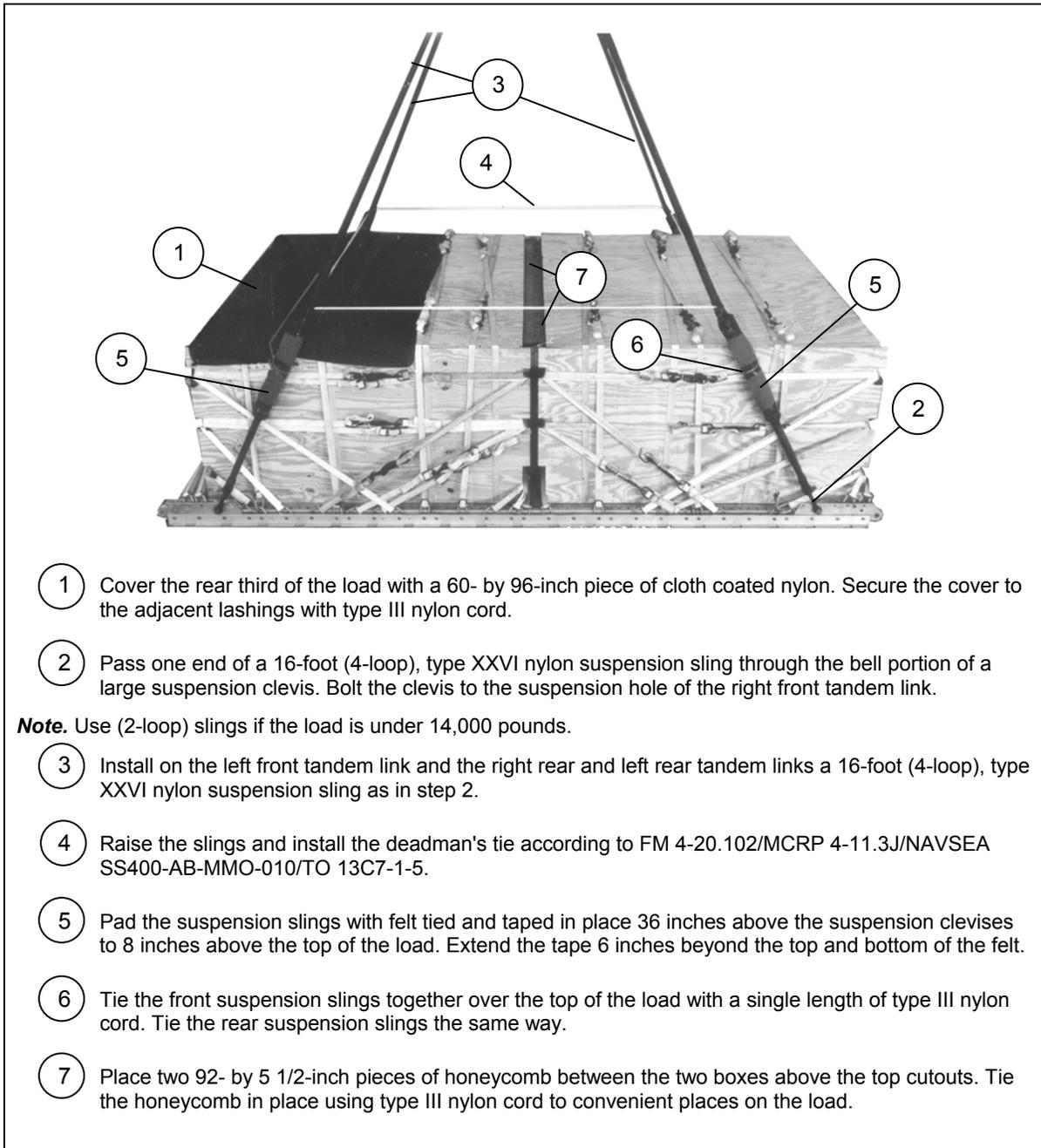


<i>Lashing Number</i>	<i>Tiedown Clevis Number</i>	<i>Instructions</i>
25	14 and 26	Pass a 60-foot lashing through clevis 14, through the middle cutout in the left side of the second box and around the left side of the box. Pass the lashing through the left middle cutout on the rear side of the second box and through clevis 26. Secure the lashing on the left side with two D-rings and a load binder.
26	14A and 26A	Pass a 60-foot lashing through clevis 14A, through the middle cutout in the right side of the second box, and around the right side of the box. Pass the lashing through the right middle cutout on the rear side of the second box and through clevis 26A. Secure the lashing on the right side with two D-rings and a load binder.

Figure 5-57. Lashings 25 and 26 Installed

INSTALLING LOAD COVER, SUSPENSION SLINGS AND DEADMAN'S TIE

5-55. Install the load cover, suspension slings and deadman's tie according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 5-58.



① Cover the rear third of the load with a 60- by 96-inch piece of cloth coated nylon. Secure the cover to the adjacent lashings with type III nylon cord.

② Pass one end of a 16-foot (4-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.

Note. Use (2-loop) slings if the load is under 14,000 pounds.

③ Install on the left front tandem link and the right rear and left rear tandem links a 16-foot (4-loop), type XXVI nylon suspension sling as in step 2.

④ 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.

⑤ Pad the suspension slings with felt tied and taped in place 36 inches above the suspension clevises to 8 inches above the top of the load. Extend the tape 6 inches beyond the top and bottom of the felt.

⑥ Tie the front suspension slings together over the top of the load with a single length of type III nylon cord. Tie the rear suspension slings the same way.

⑦ Place two 92- by 5 1/2-inch pieces of honeycomb between the two boxes above the top cutouts. Tie the honeycomb in place using type III nylon cord to convenient places on the load.

Figure 5-58. Load Cover, Suspension Slings, and Deadman's Tie Installed

INSTALLING PARACHUTES

5-56. Consult FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 for the number of cargo parachutes required for the weight of the load. Four G-11 cargo parachutes are shown here. Install the cargo parachutes according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 5-59.

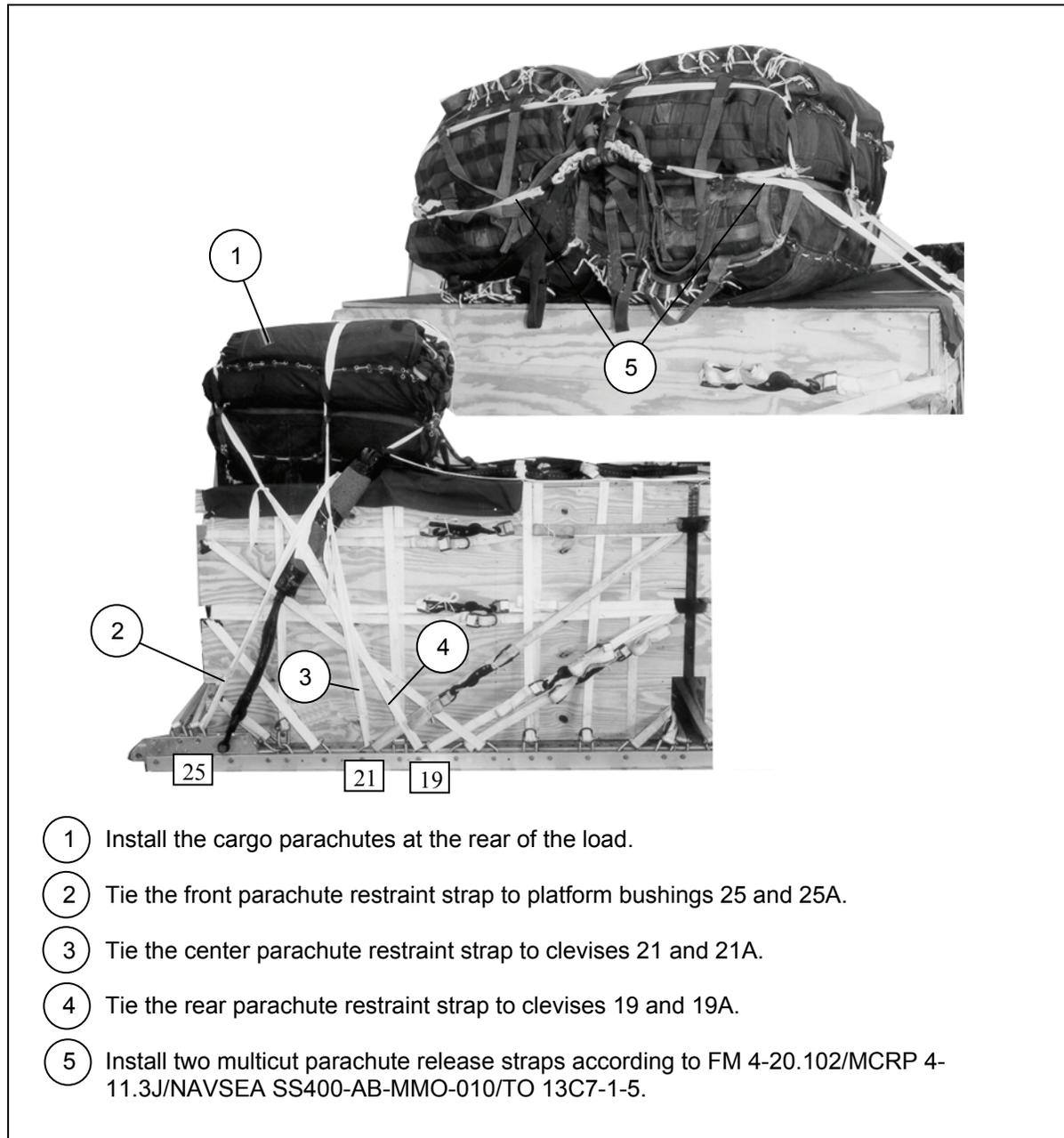


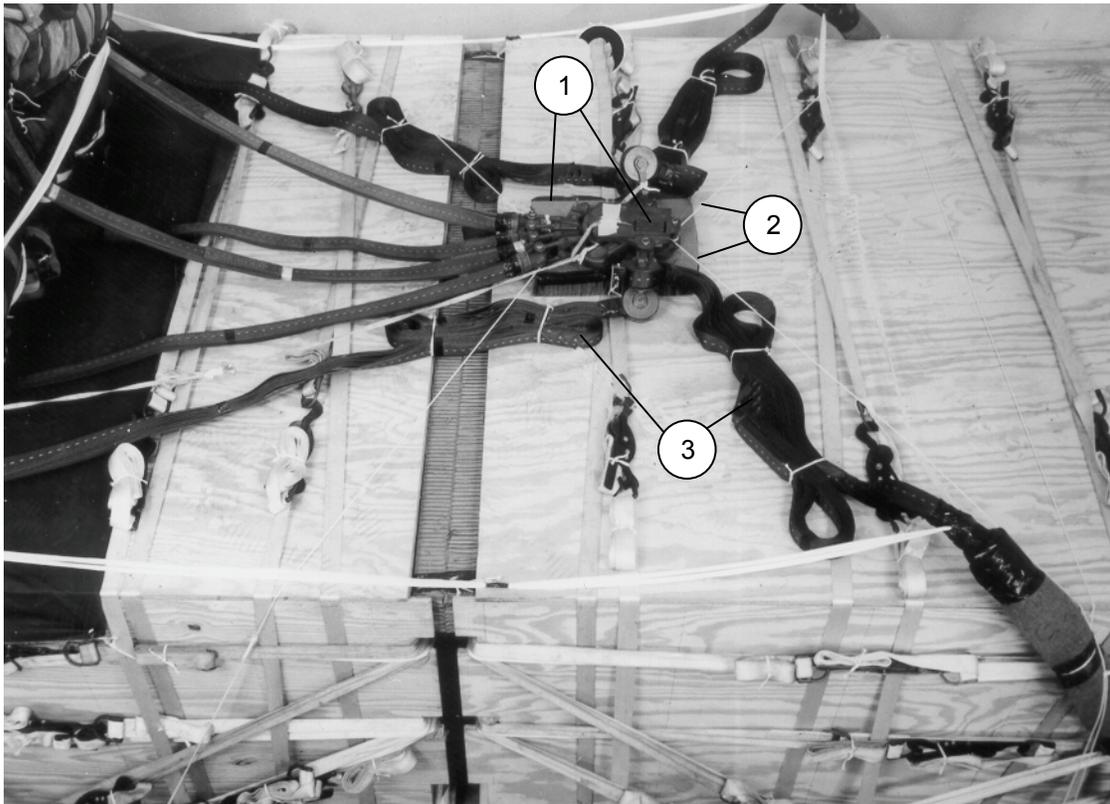
Figure 5-59. Four G-11 Cargo Parachutes Installed

INSTALLING THE RELEASE SYSTEM

5-57. Prepare, attach, and safety an M-2 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 5-60.

CAUTION

When rigging a single parachute load, ensure the rear parachute release safety tie is routed under the parachute securing ties.



- 1 Prepare and install the M-2 cargo parachute release according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Place the assembly on a 10- by 12- inch piece of honeycomb in front of the parachutes as shown. Secure the honeycomb to the load with type III nylon cord.
- 2 Safety the release to convenient points 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.

Figure 5-60. Release System Installed

INSTALLING THE EXTRACTION SYSTEM

5-58. Install the extraction system according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 5-61.

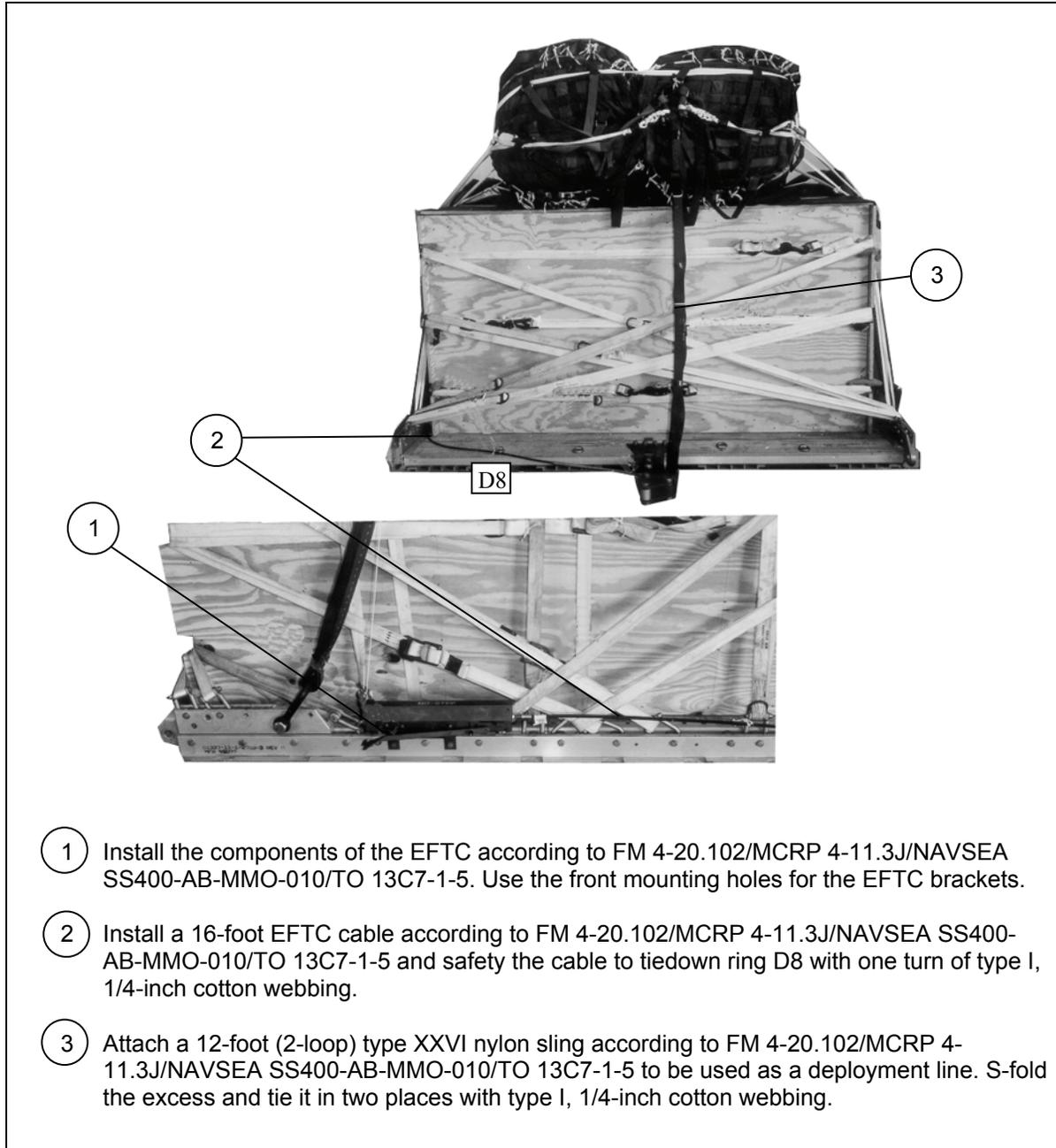


Figure 5-61. Extraction System Installed

PLACING EXTRACTION PARACHUTE

5-59. 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

5-60. 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

5-61. 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 5-62. Complete Shipper's Declaration for Dangerous Goods. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

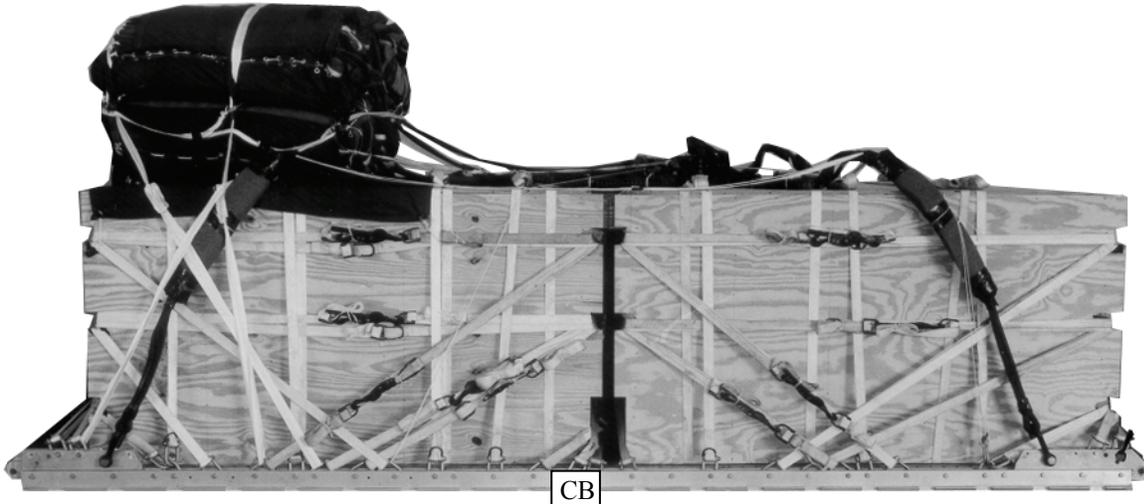
EQUIPMENT REQUIRED

5-62. Use the equipment listed in Table 5-4 to rig this load.

Note. Table does not include materials which may be needed to pad and restrain supplies inside the boxes.

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

Minimum Weight:	5,040 pounds
Maximum Suspended Weight.....	20,000 pounds
Height	88 inches
Width.....	108 inches
Overall Length	192 inches
Overhang: Front	0 inches
Rear	0 inches
Center of Balance (from front edge of the platform).....	97 inches
Extraction System with 16-foot cable (adds 18 inches to length of platform)	EFTC

Note. Refer to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 (Table 2-2) when adding additional parachutes for heavier loads for the suspension/tandem link positioning.

Figure 5-62. Mass Supply Boxes Rigged on a 16-Foot, Type V Platform for Low-Velocity Airdrop

Table 5-4. Equipment Required for Rigging Mass Supply Boxes 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
	Clevis, suspension:	
4030-00-090-5354	1-inch (large)	5
8305-00-880-8155	Cloth, coated (nylon, type II, green, 60-in)	As required
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	4
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-191-1101	Felt, ½-inch thick	As required
1670-01-183-2678	Leaf, extraction line (line bag) (add 2 for C-17)	2
	Line, extraction, type XXVI nylon webbing:	
1670-01-062-6313	60-foot (3-loop), type XXVI	1
1670-01-107-7651	140-foot (3-loop), type XXVI	1
1670-01-062-6313	60-foot (3-loop), type XXVI for C-17 drogue line	1
1670-01-493-6418	Link assembly, two-point:	1
5351-00-010-4659	Nail, steel wire, common 8d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb	1 sheet
	Parachute:	
1670-01-016-7841	Cargo, G-11	4
1670-00-040-8135	Cargo, extraction, 28-foot	1
1670-01-063-3715	Cargo, extraction, 15-foot for C-17	1
	Platform, airdrop, type V, 16-foot	
1670-00-128-4981	Plywood, ¾- by 48- by 96-inches	12 sheets
1670-01-353-8425	Bracket assembly, EFTC	1
1670-01-162-2372	Bracket assembly, extraction	1
1670-01-162-2376	Clevis assembly	56
1670-01-162-2381	Tandem link	4
1670-01-097-8817	Release, cargo parachute, M-2	1

Table 5-4. Equipment Required for Rigging Mass Supply Boxes 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:	
1670-01-062-6308	12-foot (4-loop), type XXVI nylon webbing	1
1670-01-063-7761	16-foot (2-loop), type XXVI nylon webbing	4
1670-01-062-6313	60-foot (3-loop), type XXVI nylon webbing	4
5340-00-040-8219	Strap parachute release, multicut	2
7501-00-266-5016	Tape, adhesive, 2-inch	As required
7501-00-266-6710	Tape, masking	As required
1670-00-937-0271	Tiedown assembly, 15-foot	86
1670-01-483-8259	Towplate release mechanism (H-block) (C-17)	1
	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

Chapter 6

Rigging Mass Supply Box on a 20-Foot, Type V Platform for Low-Velocity Airdrop

DESCRIPTION OF LOAD

6-1. Two mass supply boxes are rigged for low-velocity airdrop on a 20-foot, type V airdrop platform. Loads may include any bulk items of general supply that can be packed into the box without shifting the load. Each load must weigh at least 6,300 pounds, including parachutes. Refer to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 for the weight limitations for the number of parachutes to be used.

PREPARING PLATFORM

6-2. Prepare a 20-foot, type V platform as shown in Figure 6-1.

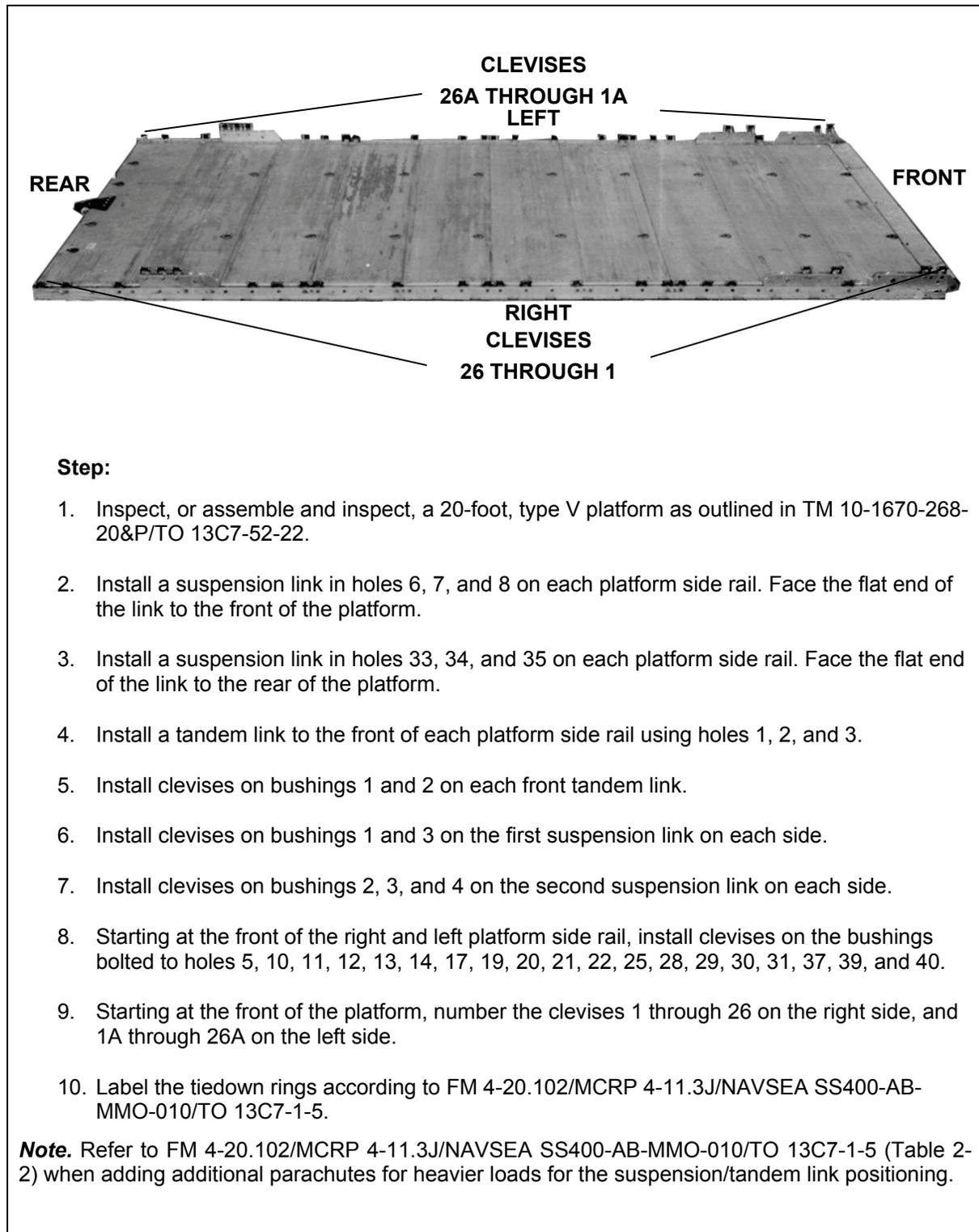


Figure 6-1. Platform Prepared

PLACING LASHINGS ON PLATFORM

6-3. Pre-position fourteen 15-foot lashings through the tiedown rings on the platform according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 6-2.

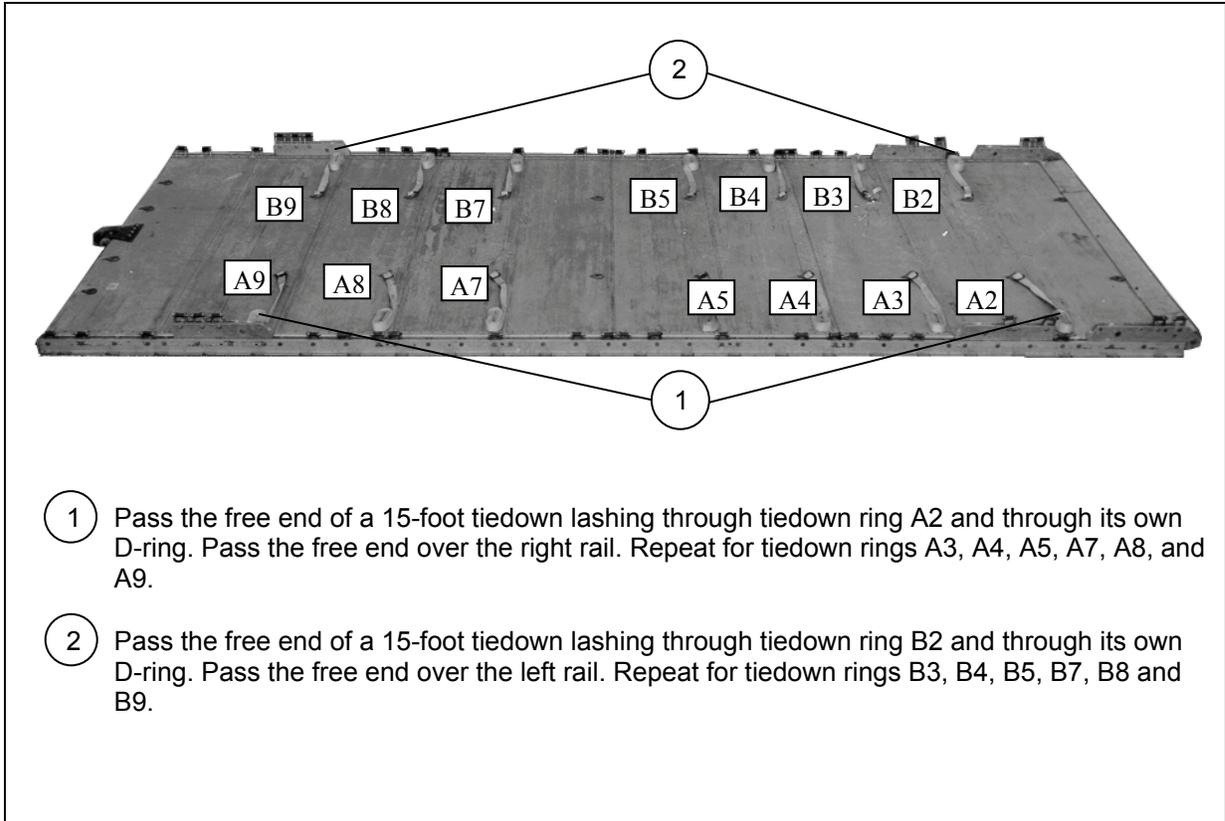


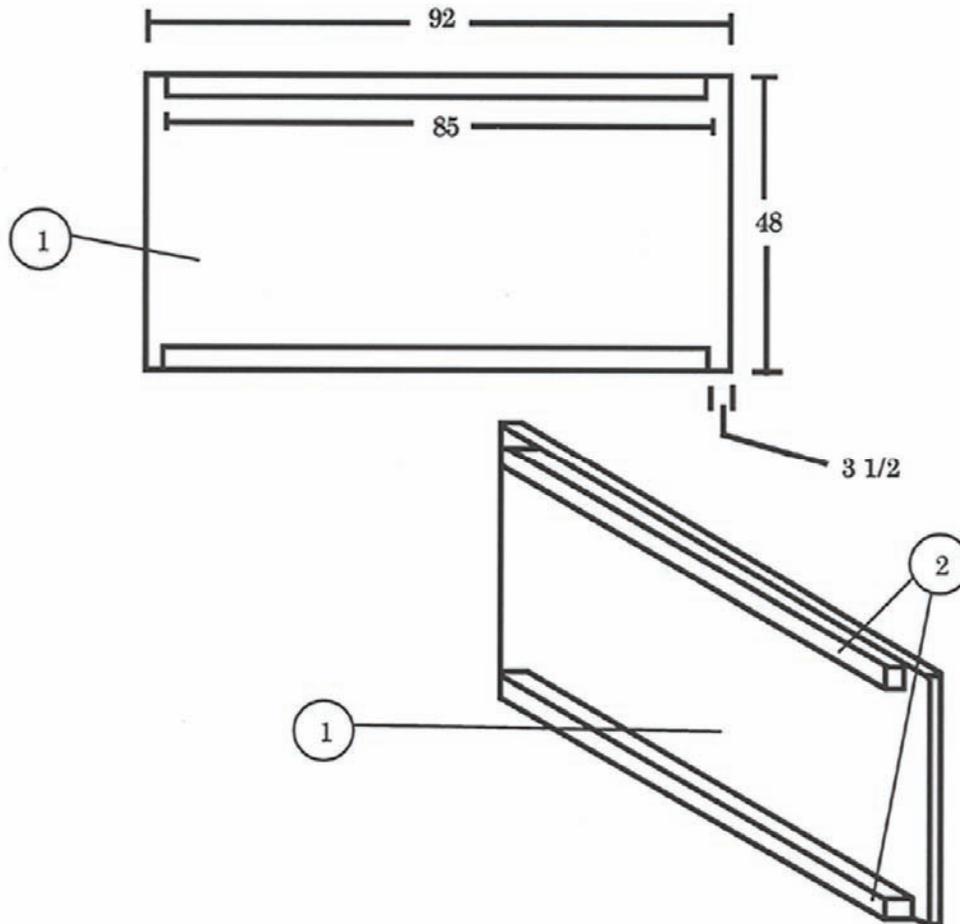
Figure 6-2. Lashings Pre-positioned on Platform

CONSTRUCTING AND FORMING STORAGE BOX COMPONENTS

6-4. Construct the individual components of a storage box as shown in Figures 6-3 through 6-5. Partially assemble the first box for loading as shown in Figure 6-6.

Notes.

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

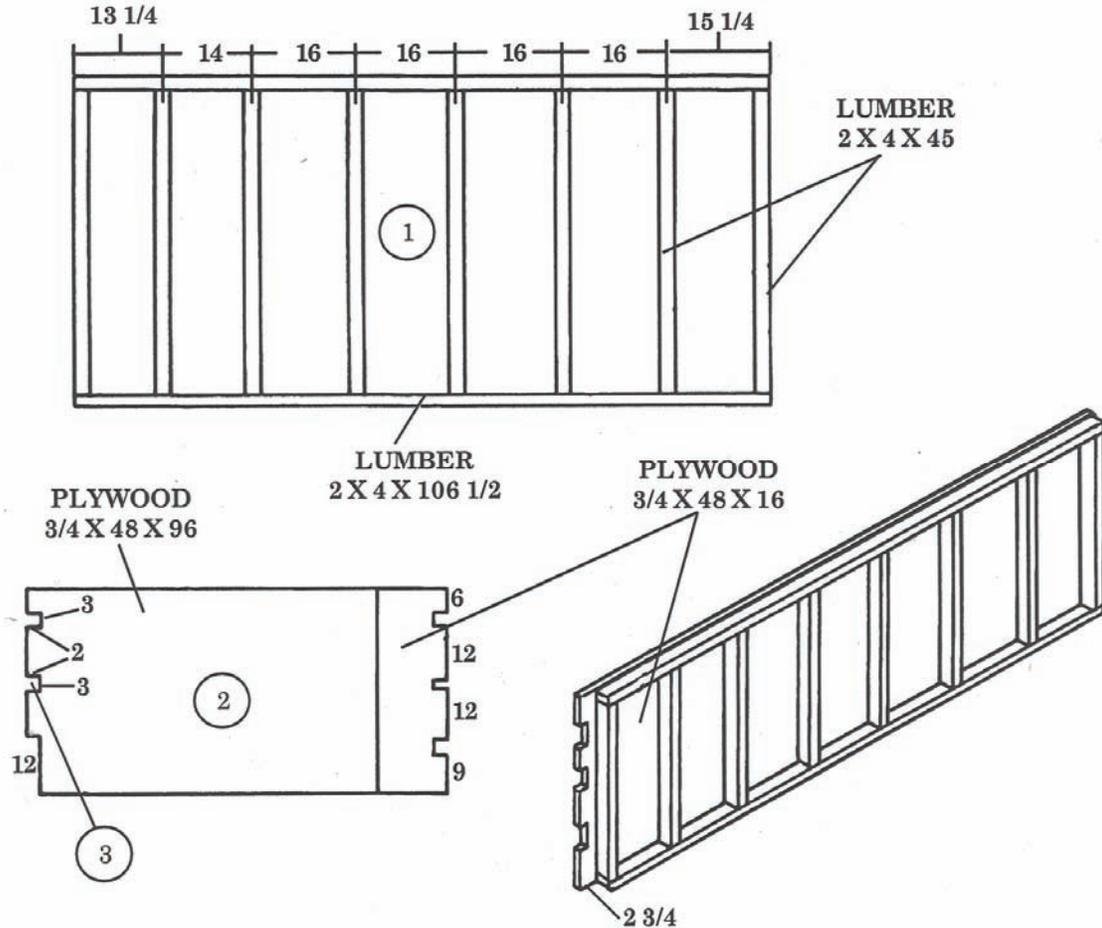


- 1 Cut four 3/4- by 48- by 92-inch pieces of plywood.
- 2 Nail a 2- by 4- by 85-inch piece of lumber along the top and bottom edges of each of the four end pieces with 8d nails as shown. Allow the plywood to extend past the lumber 3 1/2 inches on each side.

Figure 6-3. Box Ends Constructed

Notes.

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

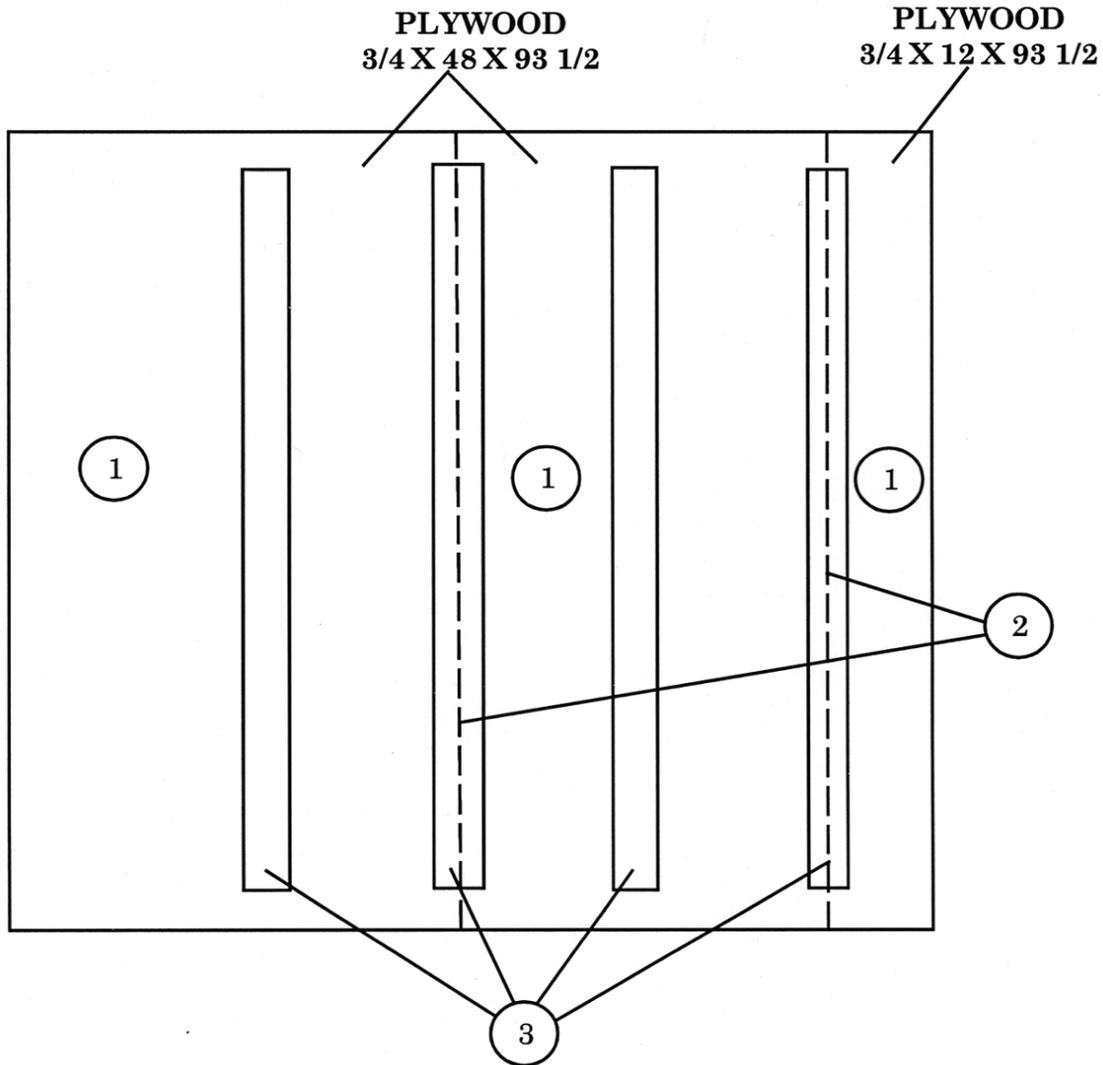


- ① Build a frame of 2- by 4-inch lumber as shown for each of the four box sides required. Space the upright pieces exactly as shown. Spacing is measured on center, except the ends.
- ② Lay a full 3/4- by 48- by 96-inch sheet of plywood and a 3/4- by 16- by 48-inch piece of plywood, unfinished side down, over the frame made in step 1 so that the joint between the pieces is centered over the second upright from the left. Nail the plywood to the frame so that the edges are flush with the top and bottom of the frame and the plywood extends past the frame 2 3/4 inches on each end.
- ③ Make 2- by 3-inch cutouts as shown in each of the four sides. Face the 12-inch cutout to the right on two of the sides, and to the left on the other two.

Figure 6-4. Box Sides Constructed

Notes.

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



- ① Cut two 3/4- by 48- by 93 1/2-inch pieces of plywood. In addition, cut a 3/4- by 12- by 93 1/2-inch piece of plywood.
- ② Lay the pieces of plywood cut in step 1 together, finished side up, as shown.
- ③ Space four 2- by 4- by 85-inch pieces of lumber flat side down under the plywood as shown. Nail the plywood to the lumber.
- ④ Repeat steps 1 through 3 to make the top for the second box. (Not shown)

Figure 6-5. Tops of Boxes Constructed

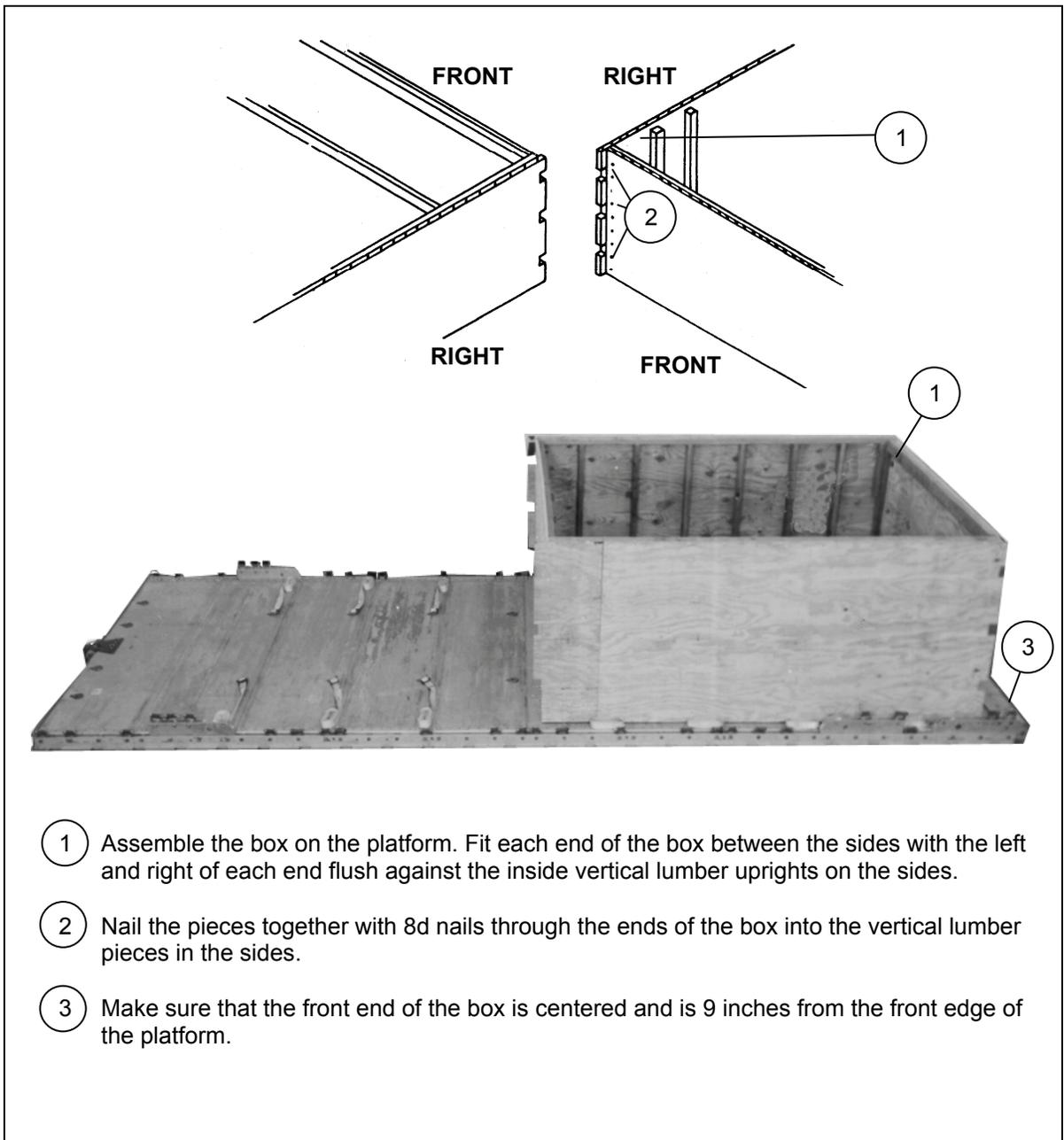


Figure 6-6. Box Partially Assembled for Loading

LOADING AND CLOSING THE BOXES

6-5. Load and close the boxes as described below.

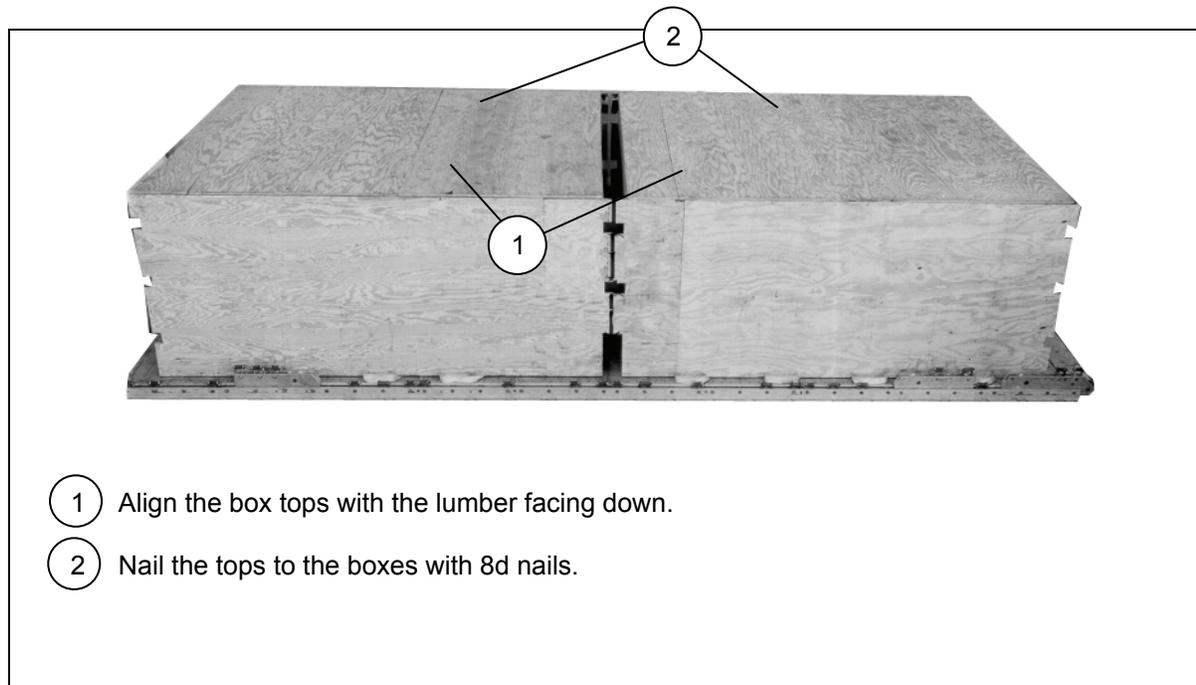
- Use the tiedown rings inside the box to secure the load, if necessary.
- Use honeycomb, if necessary, to cover the platform inside the box or to fill empty space.
- The inside ends of both boxes may be cut out to allow for long items such as lumber or tent poles.
- Assemble and load the second box. Allow 6 inches between the ends of the two boxes.
- Close both boxes as shown in Figure 6-7.

INSTALLING LASHINGS

6-6. Install the lashings and secure pre-positioned lashings as shown in Figures 6-8 through 6-15.

Notes.

1. Pad the cutouts in the box sides with cellulose wadding. Tape the wadding in place.
 2. This load requires lashings over 30 feet in length according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Lashings must be positioned through clevises before sections are joined together.
-



- 1 Align the box tops with the lumber facing down.
- 2 Nail the tops to the boxes with 8d nails.

Figure 6-7. Boxes Closed