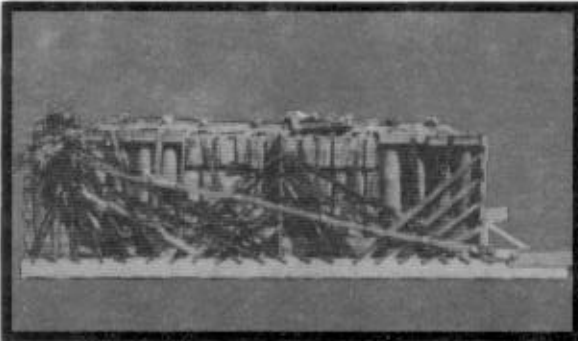
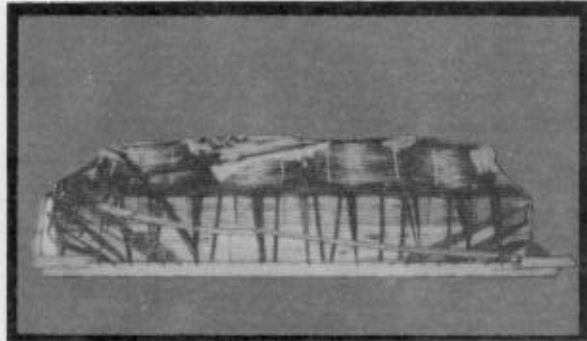
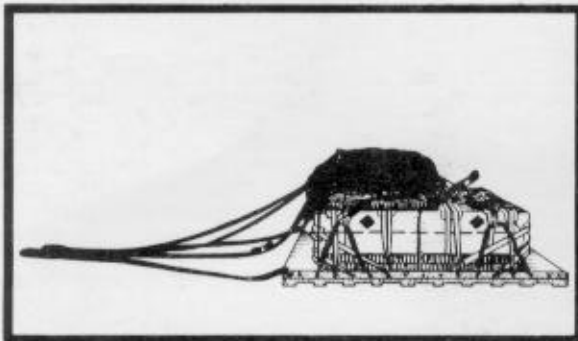


**ARMY FM 10-512
AIR FORCE TO 13C7-1-8**

AIRDROP OF SUPPLIES AND EQUIPMENT

**RIGGING
TYPICAL SUPPLY LOADS**



This copy is a reprint which includes current pages from Changes 1 and 2, 3

DEPARTMENTS OF THE ARMY AND THE AIR FORCE



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
AERIAL DELIVERY AND FIELD SERVICES DEPARTMENT
U.S. ARMY QUARTERMASTER CENTER AND SCHOOL
1010 SHOP ROAD
FORT LEE, VIRGINIA 23801-1502

ATSM-ADFSD


7 October 1998

MEMORANDUM FOR Commander, US Army Training Support Center, ATTN: ATIC-TIST (Mr. Baston), Fort Eustis, VA 23604

SUBJECT: Distribution Restriction Notice on Airdrop Rigging Manuals

1. As proponent for development of all 10-500 series airdrop rigging field manuals and the 10-450 sling load manuals, it has been determined that the distribution restriction on these field manuals should be changed to read: Approved for public release, distribution unlimited.
2. It is requested that unrestricted release of these field manuals be made via the Army Training Digital Library.
3. The new distribution notice will be added to the cover pages as future changes/revisions are made to the manuals.
4. Enclosed you will find a numerical list and the number of changes of the manuals that have unlimited distribution.
5. The point of contact for this action is Mr. Roger Hale, DSN 687-4769.

Encl


THEODORE J. DLUGOS
Director, Aerial Delivery and
Field Services Department

Distribution restrictions for the following Airdrop field manuals should read "**Approved for public release; distribution is unlimited.**"

10-450-3	10-524, c2	10-552, c2
10-450-4	10-526, c3	10-554
10-500-2, c2	10-527, c3	10-555, c2
10-500-3, c1	10-528, c6	10-556
10-500-7, c1	10-529, c1	10-557
10-500-45	10-530	10-558, c1
10-500-53	10-531, c2	10-562
10-500-66, c1	10-532, c4	10-564, c6
10-500-71	10-533	10-567, c1
10-508, c1	10-534, c2	10-569, c1
10-510, c3	10-535	10-571
10-512, c4	10-537, c4	10-572
10-513, c3	10-539, c3	10-573, c1
10-515, c1	10-540, c2	10-574, c4
10-516	10-541, c1	10-575, c2
10-517, c5	10-542, c2	10-576, c1
10-518	10-543, c2	10-577
10-519, c3	10-546	10-579, c2
10-520, c3	10-547, c1	10-584
10-521, c2	10-548, c1	10-586
10-522, c1	10-549	10-588
10-523, c2	10-550, c3	10-591, c1



DEPARTMENT OF THE ARMY

HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-5000

REPLY TO
ATTENTION OF

ATCD-SL (70-1f)

21 Oct 96

MEMORANDUM FOR DEPUTY CHIEF OF STAFF OPERATIONS AND PLANS,
400 ARMY PENTAGON, ATTN: DAMO-FDL, WASHINGTON
DC 20310-0400

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

1. References:

a. Message, HQDA, DAMO-FDL, 231825Z Apr 96, subject: QM FAA Results.

b. Memorandum, HQ TRADOC, ATCG, 29 Jul 96, Army Airdrop Capabilities Assessment.

2. At the 29 Mar 96 QM FAA briefing to the Director of Army Staff, the decision was reached to revisit the Army's decision to "shelf" Low Altitude Parachute Extraction System (LAPES) (reference 1a).

a. Reference 1b, solicited CINCs input for their positions on LAPES and assessments of airdrop capabilities. The CINCs responses will be used to chart the direction and role for airdrop in the 21st century.

b. Based on the responses received (enclosure), there is no strong support for LAPES airdrop capability at this time. The consensus for the airdrop capabilities is to continue support for current Low Velocity Airdrop System (LVAD), develop a 500-foot LVAD and further explore Advanced Precision Aerial Delivery System (APADS).

3. Further, we will continue to maintain a range of airdrop capabilities to support all contingencies throughout the Army. The results of the Army Airdrop Capabilities Assessment also will be incorporated into the Operational Concept for Aerial Delivery Operations and Improved Cargo Aerial Delivery Capability Mission Needs Statement being developed by the Quartermaster Directorate of Combat Developments, U.S. Army Combined Arms Support Command (CASCOM).

4. The HQ TRADOC POC is MAJ Higgins, Airborne Airlift Action Office, ATCD-SL, E-mail: higginsn@emh10.monroe.army.mil, DSN 680-2469/3921, datafax DSN 680-2520.

ATCD-SL

SUBJECT: Quartermaster (QM) Functional Area Assessment (FAA)
Response

FOR THE DEPUTY CHIEF OF STAFF FOR COMBAT DEVELOPMENTS:

Encl

JOHN A. MANDEVILLE
Colonel, GS
Director, Combat Service Support

CF:

USACASCOM (ATCL-CG/ATCL-QC/ATCL-MES)

USAQMC&S (ATSM-CG/ATSM-ABN/FS)

USANRDEC (SSCNC-UT/AMSSC-PM)

ORGANIZATION	LAPES	LVAD	500' LVAD	APADS	SPTS/ NOT SPEC
USSOCOM		X	X	X	
EUCCOM					X
CENTCOM		X	X		
FORSCOM		X	X	X	
TRANSCOM					X
SOUTHCOM	X			X	
VIII ARMY					X
ACOM					X

USSOCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but supports LVAD as well as APADS.

EUCCOM: Draft memorandum specifically states that the command support the need for a low level airdrop capability. However, memorandum summarizes that the specific capability is not important as to have a capability to meet the required mission/threat profile.

CENTCOM: Memorandum specifically states that the command does not support LAPES airdrop capability, but support both current LVAD and 500-foot LVAD airdrop capabilities.

FORSCOM: 1st Endorsement specifically states that the command does not support LAPES airdrop capability, however supports LVAD, 500-foot LVAD and APADS.

TRANSCOM: Memorandum does not specifically address any airdrop capability as it talks to the 21st century requiring the full spectrum of tactical delivery methods.

SOUTHCOM: Memorandum specifically supports LAPES and APADS airdrop capabilities for their command.

VIII ARMY: E-Mail note for VIII Army states that the command has no input to the assessment as their plans call for a limited employment of airdrop.

ACOM: Sent request for input on 30 Sep 96. Received verbal response on 16 Oct 96 stating command is indifferent on the specific capability received.



DEPARTMENT OF THE ARMY
HEADQUARTERS UNITED STATES ARMY TRAINING AND DOCTRINE COMMAND
FORT MONROE, VIRGINIA 23651-3000

REPLY TO
ATTENTION OF

6 SEP 1995

ATCD-SL (70-1f)

MEMORANDUM FOR

Major General Thomas W. Robison, Commander, U.S. Army Combined
Arms Support Command and Fort Lee, Fort Lee, VA 23801-6000
Major General Robert K. Guest, Commander, U.S. Army Quartermaster
Center and School, Fort Lee, VA 23801-5030

SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly.

1. References:

a. Message, HQ TRADOC, ATCD-SL, 100930Z Jan 95, subject:
LAPES.

b. OVVM Note, HQ USACASCOM, 30 March 95, subject: TRADOC
Disassembly of LAPES.

2. The U.S. Army and other services recently have concurred that
LAPES will be terminated, as this capability is no longer required
as a viable wartime contingency airdrop option. However,
Headquarters, Department of the Army (DA), Deputy Chief of Staff
for Operations and Plans, has agreed that LAPES technology will be
shelved, and all specialized equipment preserved for possible
future use.

3. Take the necessary steps to terminate training and leader
development concerning LAPES operations. Major General Guest's
questions regarding the disassembly of LAPES (enclosed) with
following guidance will be utilized:

a. "Does the U.S. Army Quartermaster Center and School
(USAQMC&S) continue to publish LAPES procedures in their joint
field manual (FMs)/technical order manuals?" "Do we publish the
LAPES procedures that have been written but not been printed yet?"
Publishing LAPES procedures in all joint publications, Army FMs,
regulations, etc., will be discontinued and addressed in the next
revision of the aforementioned documents. Concurrently, all LAPES
procedures that have been written and not printed will not be
published.

6 SEP 1995

ATCD-SL
SUBJECT: Low Altitude Parachute Extraction System (LAPES)
Disassembly

b. "Do we keep LAPES in our programs of instruction (POIs)?" "Do we teach LAPES to other services and our allies?" The USAQMC&S will remove LAPES procedures from PCI and cease teaching LAPES to other services and/or allies.

c. "What do we teach to folks that have LAPES equipment in their war reserves?" All instruction concerning LAPES procedures will be discontinued whether LAPES equipment is located in units or in war reserves.

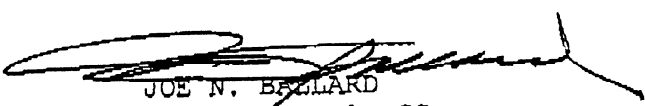
d. "What is the DA/TRADOC guidance on disposition of unit, depot, and war reserves LAPES equipment?" All LAPES equipment in war reserves and depot should be preserved with the exception of a few items that can be utilized in other existing airdrop capabilities. Specifically, the Type V airdrop platforms and attitude control bars of the LAPES system are being utilized to augment current Low Velocity Airdrop Systems (LVADS) loads.

e. "What is the guidance to U.S. Army Test and Experimentation Command on force development test and experimentation certification of LAPES loads?" The certification of all LAPES loads at the Airborne Special Operations Test Directorate will be redirected toward testing and certification of LVADS loads.

4. HQ TRADOC POC is CPT Higgins or CPT Phillips, ATCD-SL, DSN 680-2469/3921, datafax DSN 680-2520.

FOR THE COMMANDER:

Encl


JOE N. BALLARD
Major General, GS
Chief of Staff

CF:
HQDA (DAMO-FDL)
CDR, NRDEC (SAFNC-UA)
CDR, FORSCOM (FCJ3-FC)
CDR, OPTEC (CSTE-CS, CSTE-OPM)
CDR, ATCOM (AMSAT-W-TD)
DIR, ABNSOTD (ATCT-AB)
HQ TRADOC (ATCD-L, ATCD-RM, ATDO-A, ATTG-IT)

Date and time 07/18/95 10:28:11

From: HIGGINSN--MON1
To: HIGGINSN--MON1

From: OPT NEIL HIGGINS, (AAACO), 680-2464
Subject: TRADOC "DISASSEMBLY" OF LAPES

* AIRBORNE AIRLIFT ACTION OFFICE *
* (AAACO) *

** Forwarding note from BRUNEAUN--OMSNAMES 07/18/95 10:27 ***
Received: from LEE-EMH2.ARMY.MIL by MONROE-EMH2.ARMY.MIL (IBM VM SMTP V2R2)
with TOP; Tue, 18 Jul 95 10:27:22 EDT
Received: from LEE1 by LEE-EMH2.ARMY.MIL (IBM VM SMTP V2R2) with SMTP id 3547;
Tue, 18 Jul 95 10:29:34 EDT
Comments: Converted from PROFS to RFC822 format by PUMP V2.2X
Date: Tue, 18 Jul 95 10:29:26 EDT
From: NORMAN BRUNEAU <BRUNEAUN@LEE-EMH2.ARMY.MIL>
Subject: TRADOC "DISASSEMBLY" OF LAPES
To: "NEIL HIGGINS- AAACO " <HIGGIN@MONROE-EMH1.ARMY.MIL>

** Resending note of 06/30/95 09:23

From: LARRY MC MILLIAN AAA <MCMILLI@MONROE-EMH1.ARMY.MIL>
To: NORMAN BRUNEAU
Subject: TRADOC "DISASSEMBLY" OF LAPES

NEIL- HERE ARE THE QUESTIONS THAT MG GUEST WANTS DA/ TRADOC TO ANSWER RE LAPES, AS I UNDERSTAND HIS GUIDANCE. I HAVE DISCUSSED THESE W/ OUR ABN DPT. IF THESE QUESTIONS MAKE SENSE, GIVE ME AN "UP" BEFORE I FORMALLY SEND ANYTHING OUT. MG GUEST WANTS SPECIFIC GUIDANCE FM TRADOC ON LAPES, RESPONSE NEEDS TO BE CLEAR AND TO THE POINT. A LOT OF THIS WILL HINGE ON WHAT ACC PLANS TO DO W/ LAPES NOW THAT THE AIR STAFF HAS GIVEN THEM THE GREEN LIGHT TO KILL IT. IF THEY PLAN TO PLACE IT ON THE SHELF OR KEEP A LIMITED OR CONTINGENCY CAPABILITY, THAT WILL DRIVE YOUR ANSWER TO US, AT THIS POINT I THINK ACC WILL DO WHATEVER THE ARMY WANTS, AS THEIR PRIMARY CUSTOMER. I WILL NOT REHASH HOW THE ARMY DECIDED THEY DIDNT NEED LAPES. QUESTIONS FOLLOW:

- DOES THE GMS CONTINUE TO PUBLISH LAPES PROCEDURES IN THEIR JOINT FM/TO MANUALS?
- DO WE PUBLISH THE LAPES PROCEDURES THAT HAVE BEEN WRITTEN BUT HAVE NOT BEEN PRINTED YET?
- DO WE REMOVE ALL LAPES PROCEDURES FROM ALREADY PUBLISHED MANUALS?
- DO WE KEEP LAPES IN OUR POI?
- DO WE TEACH LAPES TO OTHER SERVICES AND OUR ALLIES?
- WHAT DO WE TEACH TO FOLKS THAT HAVE LAPES EQUIPMENT IN THEIR WAR RESERVES?
- WHAT IS THE DA/TRADOC GUIDANCE ON DISPOSITION OF UNIT, DEPOT, AND WAR RESERVE LAPES EQUIPMENT?
- WHAT IS THE GUIDANCE TO TEXCOM ON THE FUTE CERTIFICATION OF LAPES LOADS?

I KNOW THESE ARE TOUGH QUESTIONS, BUT THEY HAVE TO BE ASKED. HQ STAFFS CANNOT SIMPLY SAY "KILL IT" AND MOVE ON TO THE NEXT ISSUE. I DONT THINK WE ARE DOING OUR JOB IF WE LEAVE IT UP TO THE SCHOOLHOUSE TO INTERPRET SKETCHY GUIDANCE. THAT PLACES US IN THE POSSIBLE POSITION OF BEING ACCUSED OF NOT FOLLOWING ORDERS.

LETS TALK.....NORM

TRK 2/47

SEP 11 11 08:30AM CSSRD FT MONROE VA 66 11

DEPARTMENT OF THE ARMY
QUARTERMASTER CENTER AND SCHOOL
1201 22D STREET
FORT LEE, VIRGINIA 23801-1601

ATSM-ABN-FS

15 Dec 96

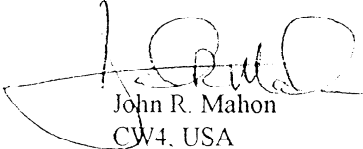
MEMORANDUM FOR RECORD

SUBJECT: Airdrop Equipment Update

Reference:

- a. Phone conversation between CW4 Mahon, CASCOM and Dick Harper, Weapons System Management Office, Army Aviation Troop Command. Subject : sab
- b. Phone conversation between CW4 Mahon, CASCOM and Don Stump, Logistics Management Specialist, Office, Deputy Chief of Staff for Logistics. Subject. sab
- c. Phone conversation between CW4 Mahon, CASCOM and Chief Msgt Okraneck, Hqrs Air Combat Command. Subject sab
- d. msg dtg R 181348Z Feb 94. subject: FCIF item: Type II platforms, PEFTC and SL/CS for Air Force unilateral training

1. Based on information received from the references a-c above, the following update is provided per request ref c, above.
 - a. The type II modular platform no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
 - b. The Parachute Extraction Transfer Force Coupling (PEFTC) no longer exists within any contingency stocks. Therefore, maintaining Joint Inspection training program is no longer required for this equipment.
 - c. The metric platform interim rigging procedures are no longer valid as they apply to metric platforms. Those rigging procedures which have dual application with the type V platform are still valid for the type V platform.
 - d. The static line connector strap (SL/CS) currently has limited application. Only those loads that specifically require this system are authorized use of this system. The SL/CS is not an across the board substitute for the Extraction Force Transfer Coupling (EFTC). These authorized loads are specific in nature and will normally be found in the special operations arena of airdrop loads. This system is not authorized for use IAW ref d, above.
2. For additional questions/information contact the undersigned at DSN 687-4733, Fax 3084.


John R. Mahon
CW4, USA
Senior Airdrop Systems
Technician

**CHANGE
NO 3**

**HEADQUARTERS
DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 14 November 1989**

**AIRDROP OF SUPPLIES AND EQUIPMENT:
RIGGING TYPICAL SUPPLY LOADS**

This change adds the procedures for rigging bulk supplies and FAST equipment for low-velocity and LAPE airdrop on the type V platform.

FM 10-512/TO 13C7-1-8, 31 August 1979, is changed as follows:

- 1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
- 2. Remove old pages and insert new pages as indicated below:

Remove pages	Insert pages
iii through v	iii through iv
.....	11-1 through 11-34
.....	12-1 through 12-19
.....	13-1 through 13-26
.....	Glossary-1 and Glossary-2
A-1	References-1

- 3. File this transmittal sheet in front of the publication for reference purposes.

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CHANGE 4

HEADQUARTERS
DEPARTMENT OF THE ARMY
UNITED STATES MARINE CORPS
DEPARTMENT OF THE AIR FORCE
WASHINGTON, DC, 3 OCTOBER 1995

AIRDROP OF SUPPLIES AND EQUIPMENT
RIGGING TYPICAL SUPPLY LOADS

This change adds the procedures for rigging 155-millimeter ammunition and 2.75-inch rockets on a 12-foot platform for LAPE airdrop. This change also adds the procedures for rigging 20-millimeter, 105-millimeter, and 155-millimeter ammunition on a 16-foot platform for low-velocity and LAPE airdrops; and rigging a mass supply box on 16- and 20-foot platforms for low-velocity airdrop.

FM 10-512/TO 13C7-1-8, 31 August 1979, is changed as follows:

1. New or changed material is identified by a vertical bar in the margin opposite the changed material.
2. Remove and insert pages as indicated below.

Remove pages

i through iv
1-1

Glossary-1 and Glossary-2
References-1

Insert pages

i through viii
1-1 and 1-2
14-1 through 14-42
15-1 through 15-99
16-1 through 16-42
17-1 through 17-26

Glossary-1
References-1

3. File this transmittal sheet in front of the publication for reference purposes.

DISTRIBUTION RESTRICTION. Distribution authorized to US government agencies only to protect technical or operational information from automatic dissemination under the International Exchange Program or by other means. This determination was made on 30 April 1993. Other requests for this document will be referred to Commander, US Army Quartermaster Center and School, ATTN: ATSM-ABN-FS, Fort Lee, VA 23801-5038.

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By Order of the Secretaries of the Army and the Air Force:
By Direction of the Commandant of the Marine Corps:

By Order of the Secretary of the Army:

Official:



JOEL B. HUDSON

*Acting Administrative Assistant to the
Secretary of the Army*

00662

DENNIS J. REIMER
*General, United States Army
Chief of Staff*

DISTRIBUTION:

Active Army, USAR, and ARNG: To be distributed in accordance with DA Form 12-11-E, requirements for FM 10-512, Airdrop of Supplies and Equipment: Rigging Typical Supply Loads (Qty rqr block no. 0897).

FIELD MANUAL
NO. 10-512
TECHNICAL ORDER
NO. 13C7-1-8

DEPARTMENTS OF THE ARMY
AND THE AIR FORCE
Washington, DC, 31 August 1979

AIRDROP OF SUPPLIES AND EQUIPMENT RIGGING TYPICAL SUPPLY LOADS

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* This manual supercedes TM 10-500-12/TO 13C7-1-8, 30 May 1973, including all changes

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CHAPTER I
INTRODUCTION

1-1. Scope

This manual shows how to rig typical supply loads of bulk material on platforms for low-velocity airdrop from C-130, C-141, and C-5 aircraft and for delivery by LAPES from the C-130 aircraft.

1-2. Special Considerations

a. Equipment Required. If the load on a platform exceeds the normal dimensions, additional quantities of airdrop equipment will be required for rigging the load (Chapter 2).

b. Platform Inspection. Careful inspection of a used platform is essential to ensure the platform meets the inspection criteria outlined in TM 10-1670-208-20&P/TO 13C3-4-12 or TM 10-1670-268-20&P/TO 13C7-52-22.

c. Dangerous Materials. These loads may contain dangerous materials. If dangerous materials are included they must be packaged, marked, and labeled according to AFR 71-4/TM 38-250. Only ammunition listed in FM 10-500-53/TO 13C7-18-41 may be airdropped.

d. Parachute and Platform Requirements. See FM 10-500-2/TO 13C7-1-5 for parachute and platform requirements. Be sure that the load meets the minimum weight requirements for the size of the platform. Add heavier items or ballast, if necessary.

1-3. Recommended Changes

You are encouraged to report any errors or omissions and suggest ways for making this a better manual. Army personnel, send your comments on DA Form 2028 directly to:

Commander
US Army Quartermaster Center and School
ATTN: ABN-FSD
Fort Lee, Virginia 23801-5036

Air Force personnel, send your reports on AFTO Form 22 through:

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402 Scott Drive, Unit 3A1
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Quantico, Virginia 22134-5021**

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CHAPTER 11

**RIGGING SUPPLY LOADS ON AN 8-FOOT, TYPE V
PLATFORM FOR LOW-VELOCITY AIRDROP****Section I****RIGGING BULK SUPPLIES****11-1. Description of Load**

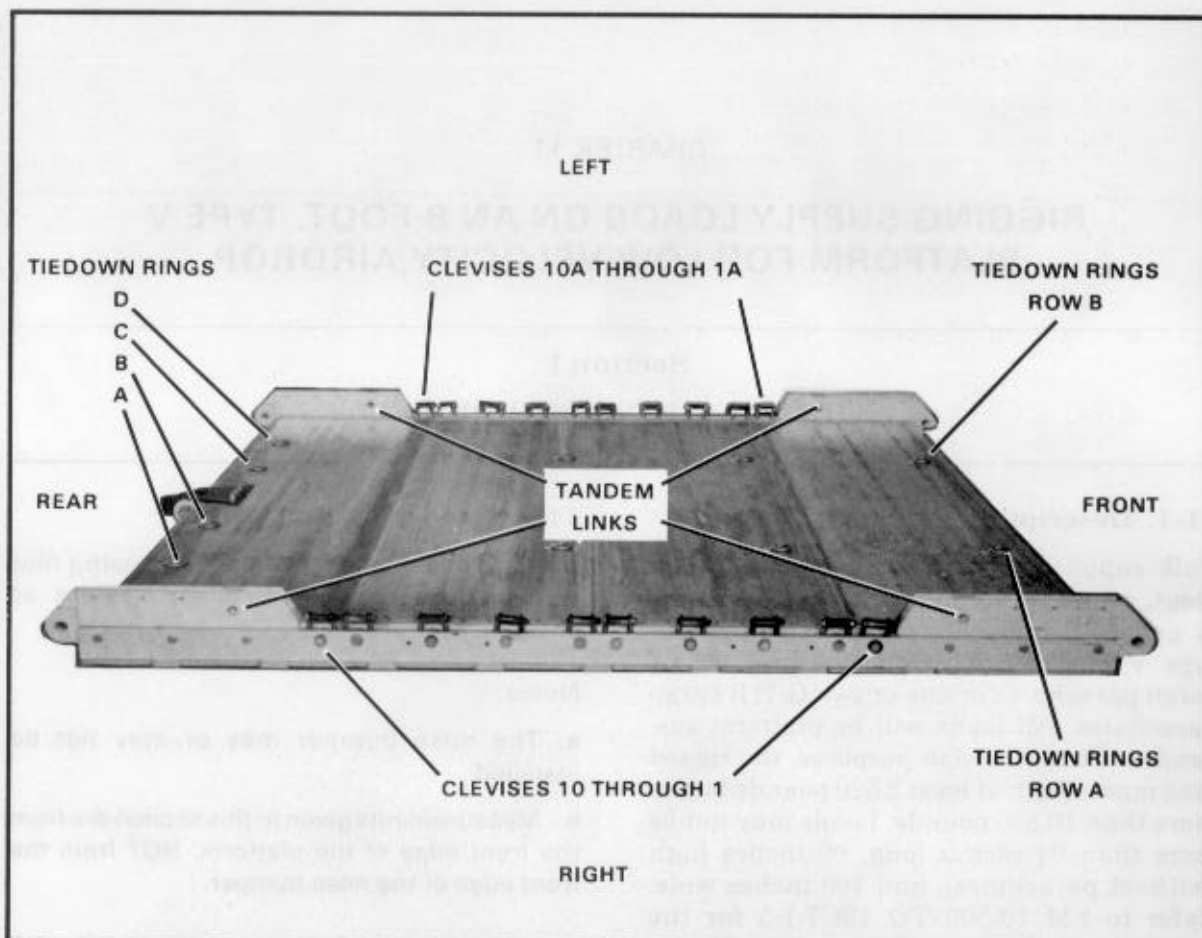
Bulk supplies consisting of rations, equipment, gasoline, ammunition, or other items of general supply are rigged on an 8-foot, type V platform with one to three G-11A cargo parachutes or one or two G-11B cargo parachutes. All loads will be platform suspended. For extraction purposes, the rigged load must weigh at least 2,520 pounds but no more than 10,500 pounds. Loads may not be more than 94 inches long, 60 inches high (without parachutes), and 100 inches wide. Refer to FM 10-500/TO 13C7-1-5 for the weight limitations for the number of parachutes to be used.

11-2. Preparing Platform

Prepare an 8-foot, type V platform using four tandem links and 20 tiedown clevises as shown in Figure 11-1.

Notes:

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



Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.
2. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
3. Install a tandem link on the rear of each platform side rail using holes 14, 15, and 16.
4. Starting at the front of each platform side rail, install cleavises on each platform side rail using the bushings bolted on holes 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13.
5. Starting at the front of the platform, number the cleavises bolted to the right side from 1 through 10.
6. Starting at the front of the platform, number the cleavises bolted to the left side from 1A through 10A.
7. Starting at the front of the platform, number the tiedown rings from 1 through 4.
8. Label the rows of tiedown rings on the first three panels A and B from right to left. Label the tiedown rings on the last panel A, B, C, and D from right to left.

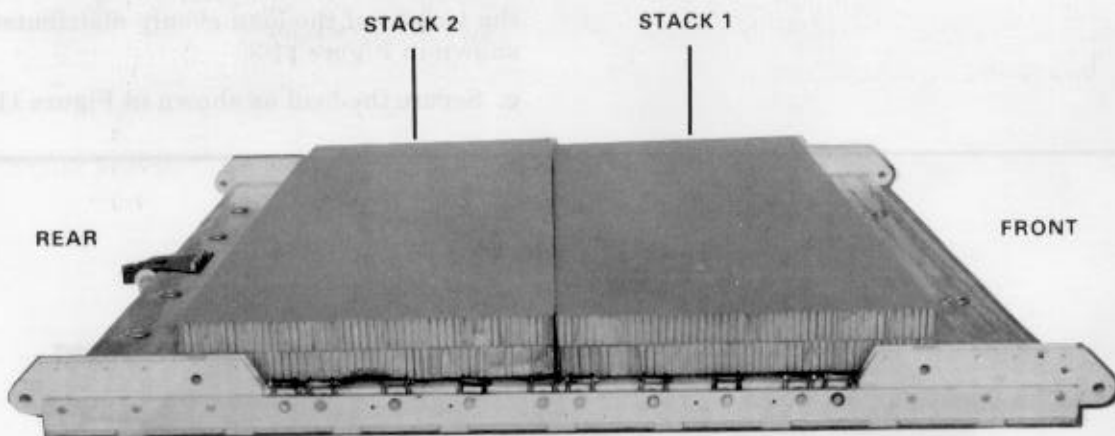
Figure 11-1. Platform prepared

11-3. Building and Placing Honeycomb Stacks

Build two honeycomb stacks and place them on the platform as shown in Figure 11-2.

Notes:

- a. Glue the layers of each honeycomb stack together.
- b. When ammunition is dropped, two layers of honeycomb are required.
- c. When rigging this load for airdrop on a drop zone with ground elevation of 6,000 to 10,000 feet, add another layer of honeycomb to each stack.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	2	96	36	Honeycomb	Center the stack between the side rails with the 96-inch edge 12 inches from the front edge of the platform.
2	2	96	36	Honeycomb	Center the stack between the side rails with the 96-inch edge 12 inches from the rear edge of the platform.

Figure 11-2. Honeycomb stacks prepared and positioned

11-4. Positioning and Securing Load

CAUTION

Only ammunition listed in FM 10-553/TO 13C7-18-41 may be airdropped. Hazardous material must be packaged, marked, and labeled as required by AFR 71-4/TM 38-250.

Position and secure the load as described below.

- a. Form four 30-foot tiedown straps. Lay two 30-foot straps across each honeycomb stack as shown in Figure 11-3.
- b. Position the load on the honeycomb with the weight of the load evenly distributed as shown in Figure 11-3.
- c. Secure the load as shown in Figure 11-3.

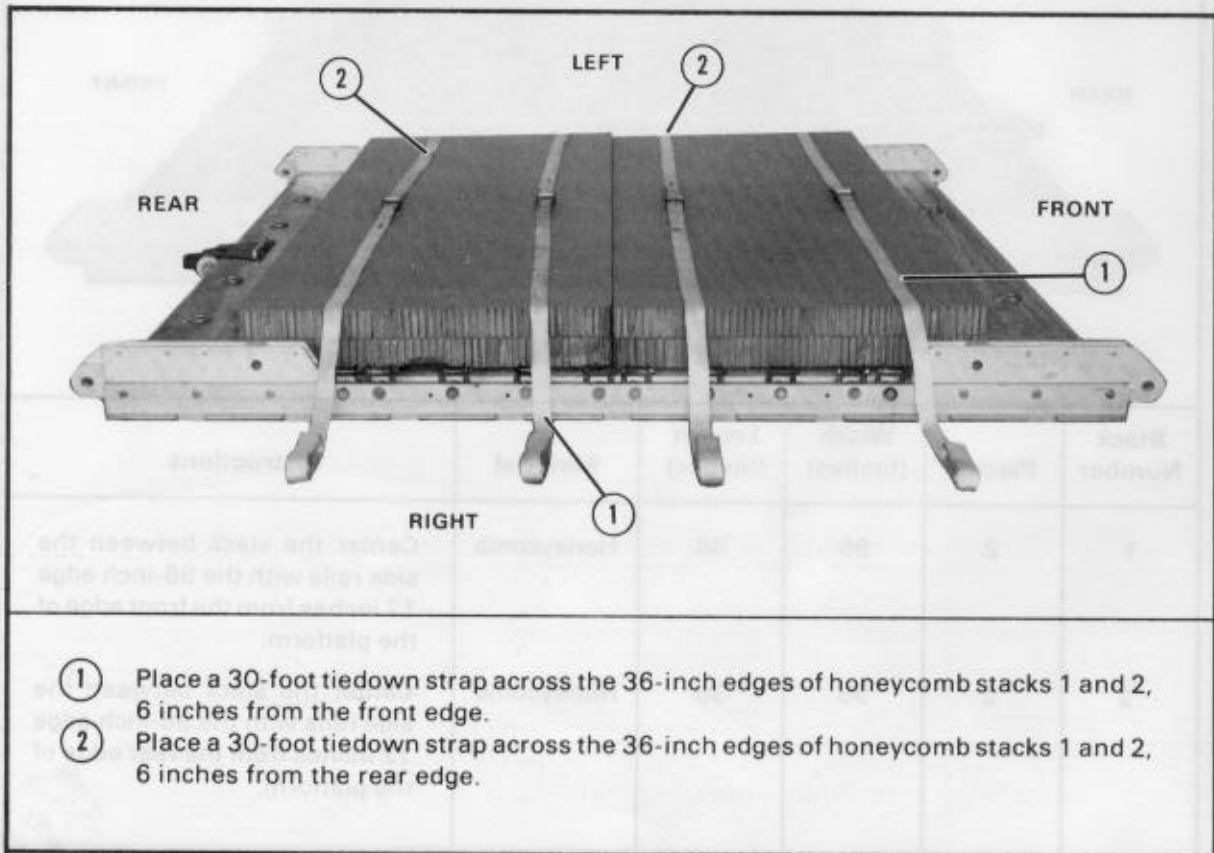
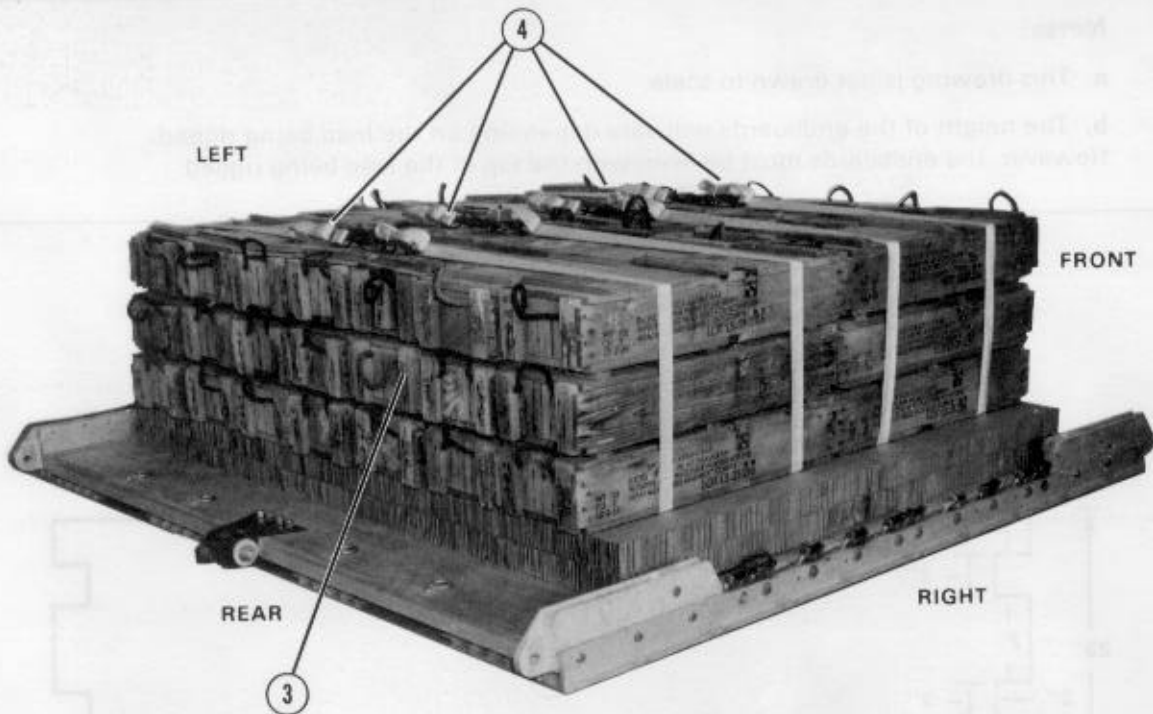


Figure 11-3. Load positioned and secured



- ③ Position the load on the honeycomb as shown.
Note: If the load differs from the one shown, adapt the procedures shown and position the load.
- ④ Pass both ends of each 30-foot tiedown strap to the top of the load. Secure the ends of each strap with two D-rings and a load binder.

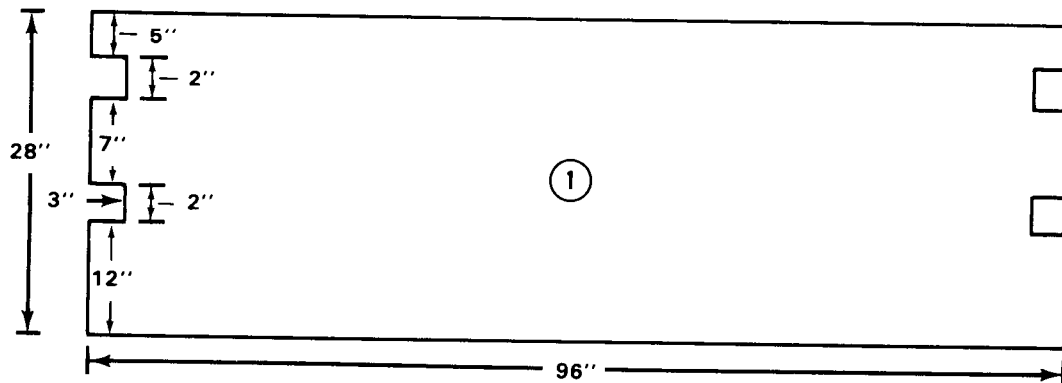
Figure 11-3. Load positioned and secured (continued)

11-5. Constructing and Installing Endboards

Construct the endboards as shown in Figure 11-4. Install the endboards as shown in Figure 11-4.

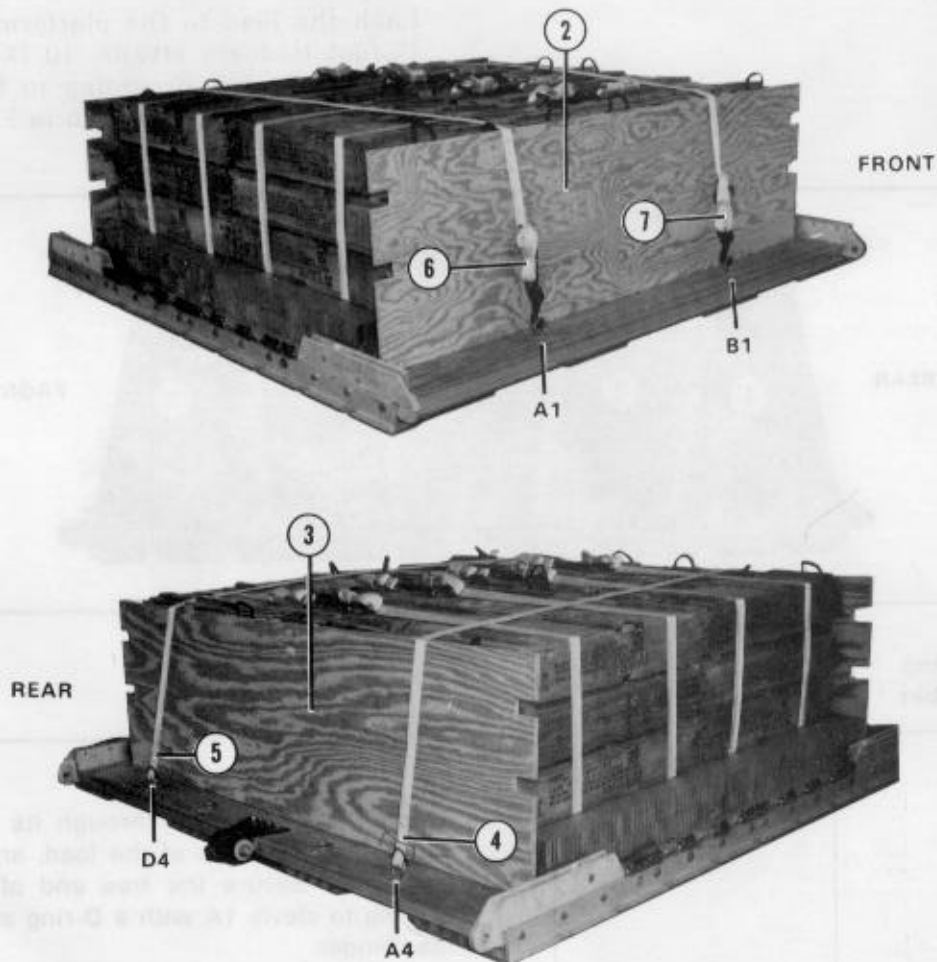
Notes:

- a. This drawing is not drawn to scale.
- b. The height of the endboards will vary depending on the load being rigged. However, the endboards must be even with the top of the load being rigged.



- ① Construct endboards using two 3/4- by 28- by 96-inch pieces of plywood. Make cutouts as shown above.

Figure 11-4. Endboards constructed and installed

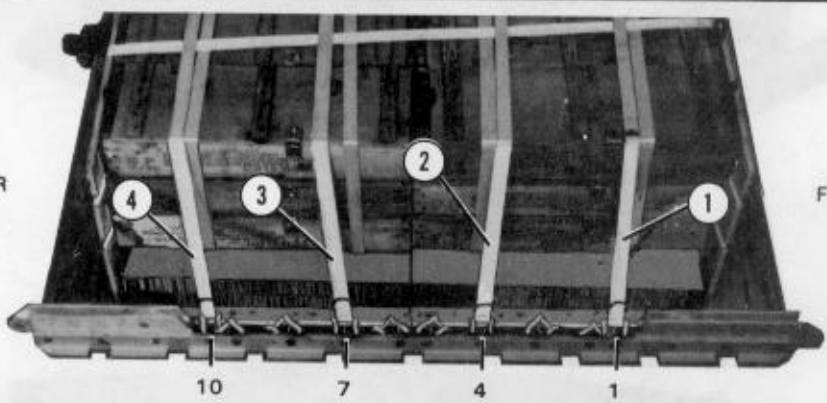


- ② Place one endboard against the front of the load.
- ③ Place one endboard against the rear of the load.
- ④ Pass the free end of a 15-foot tiedown strap through tiedown ring A4 and through its own D-ring. Pull the free end of the strap over the top of the load.
- ⑤ Pass the free end of a 15-foot tiedown strap through tiedown ring D4 and through its own D-ring. Pull the free end of the strap over the top of the load.
- ⑥ Secure the end of the tiedown strap positioned in step 4 to tiedown ring A1 with a D-ring and a load binder.
- ⑦ Secure the end of the tiedown strap positioned in step 5 to tiedown ring B1 with a D-ring and a load binder.

Figure 11-4. Endboards constructed and installed (continued)

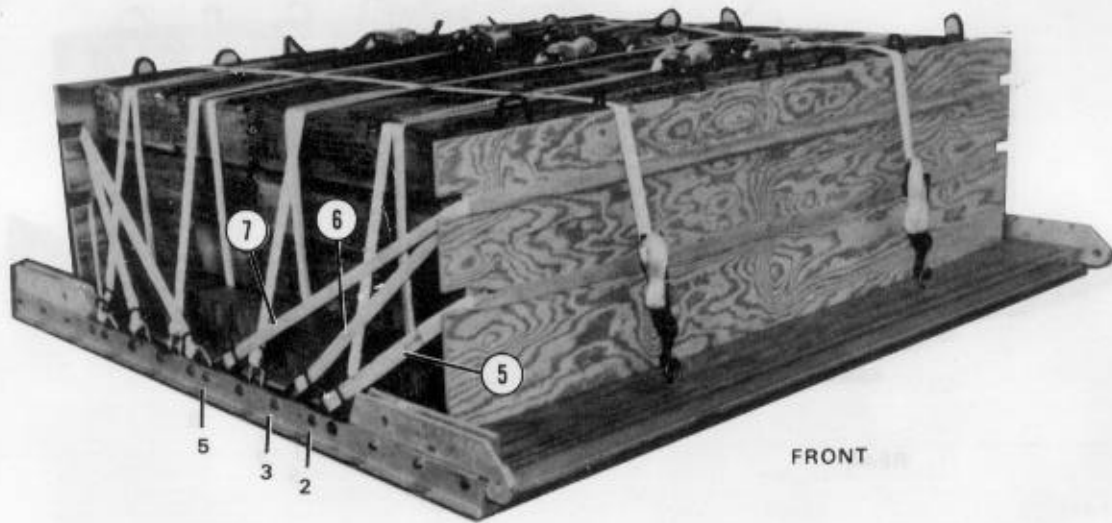
11-6. Installing Lashings

Lash the load to the platform using ten 15-foot tiedown straps, 10 D-rings, and 10 load binders according to FM 10-500/TO 13C7-1-5 and as shown in Figures 11-5, 11-6, and 11-7.



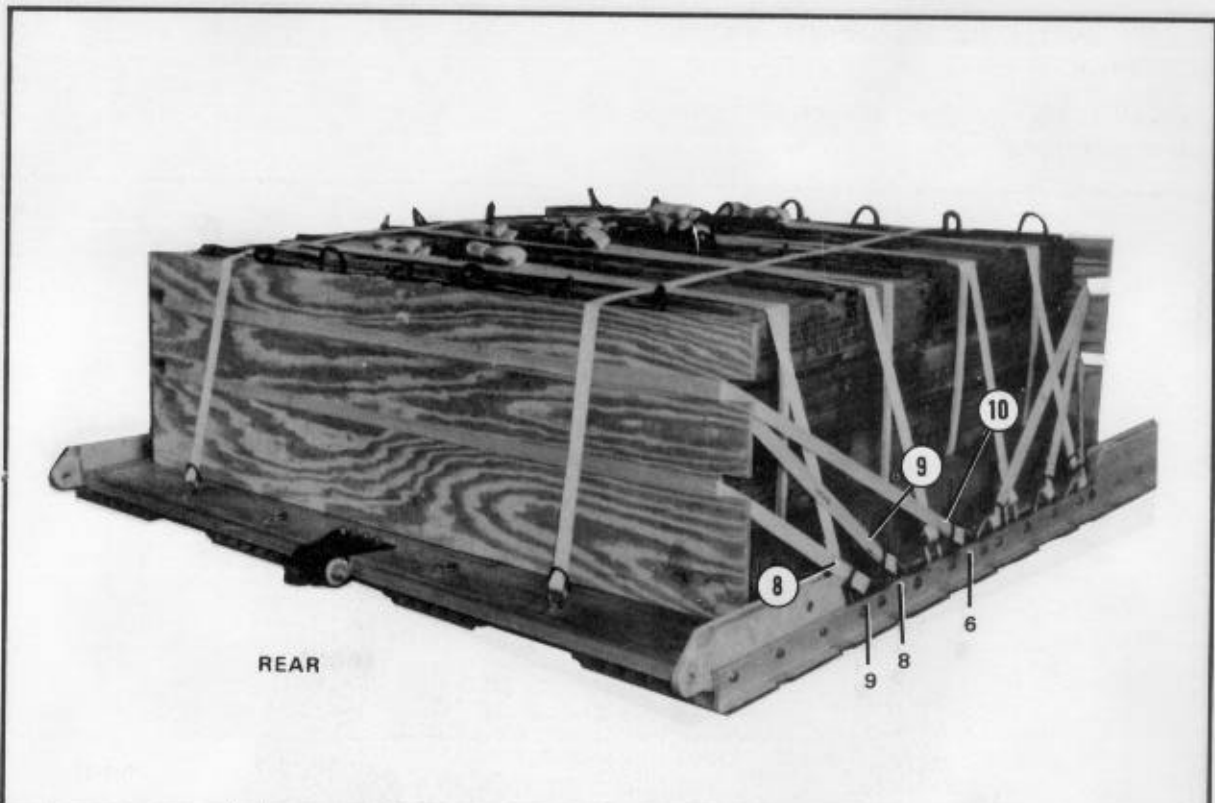
Lashing Number	Tiedown Clevis Number	Instructions
1	1 to 1A	<p>Pass lashing: Through clevis 1 and through its own D-ring, over the top of the load, and to clevis 1A. Secure the free end of the lashing to clevis 1A with a D-ring and a load binder.</p>
2	4 to 4A	<p>Through clevis 4 and through its own D-ring, over the top of the load, and to clevis 4A. Secure the free end of the lashing to clevis 4A with a D-ring and a load binder.</p>
3	7 to 7A	<p>Through clevis 7 and through its own D-ring, over the top of the load, and to clevis 7A. Secure the free end of the lashing to clevis 7A with a D-ring and a load binder.</p>
4	10 to 10A	<p>Through clevis 10 and through its own D-ring, over the top of the load, and to clevis 10A. Secure the free end of the lashing to clevis 10A with a D-ring and a load binder.</p>

Figure 11-5. Lashings 1 through 4 installed



Lashing Number	Tiedown Clevis Number	Instructions
5	2 to 2A	Pass lashing: Through clevis 2 and through its own D-ring, through the bottom cutouts around the front endboard, and to clevis 2A. Secure the free end of the lashing to clevis 2A with a D-ring and a load binder.
6	3 to 3A	Through clevis 3 and through its own D-ring, through the top cutouts around the front endboard, and to clevis 3A. Secure the free end of the lashing to clevis 3A with a D-ring and a load binder.
7	5 to 5A	Through clevis 5 and through its own D-ring, through the top cutouts around the front endboard, and to clevis 5A. Secure the free end of the lashing to clevis 5A with a D-ring and a load binder.

Figure 11-6. Lashings 5 through 7 installed



Lashing Number	Tiedown Clevis Number	Instructions
8	9 to 9A	<p>Pass lashing:</p> <p>Through clevis 9 and through its own D-ring, through the bottom cutouts around the rear endboard, and to clevis 9A. Secure the free end of the lashing to clevis 9A with a D-ring and a load binder.</p>
9	8 to 8A	<p>Through clevis 8 and through its own D-ring, through the top cutouts around the rear endboard, and to clevis 8A. Secure the free end of the lashing to clevis 8A with a D-ring and a load binder.</p>
10	6 to 6A	<p>Through clevis 6 and through its own D-ring, through the top cutouts around the rear endboard, and to clevis 6A. Secure the free end of the lashing to clevis 6A with a D-ring and a load binder.</p>

Figure 11-7. Lashings 8 through 10 installed

11-7. Installing Parachute Stowage Platform

Install the parachute stowage platform as shown in Figure 11-8.

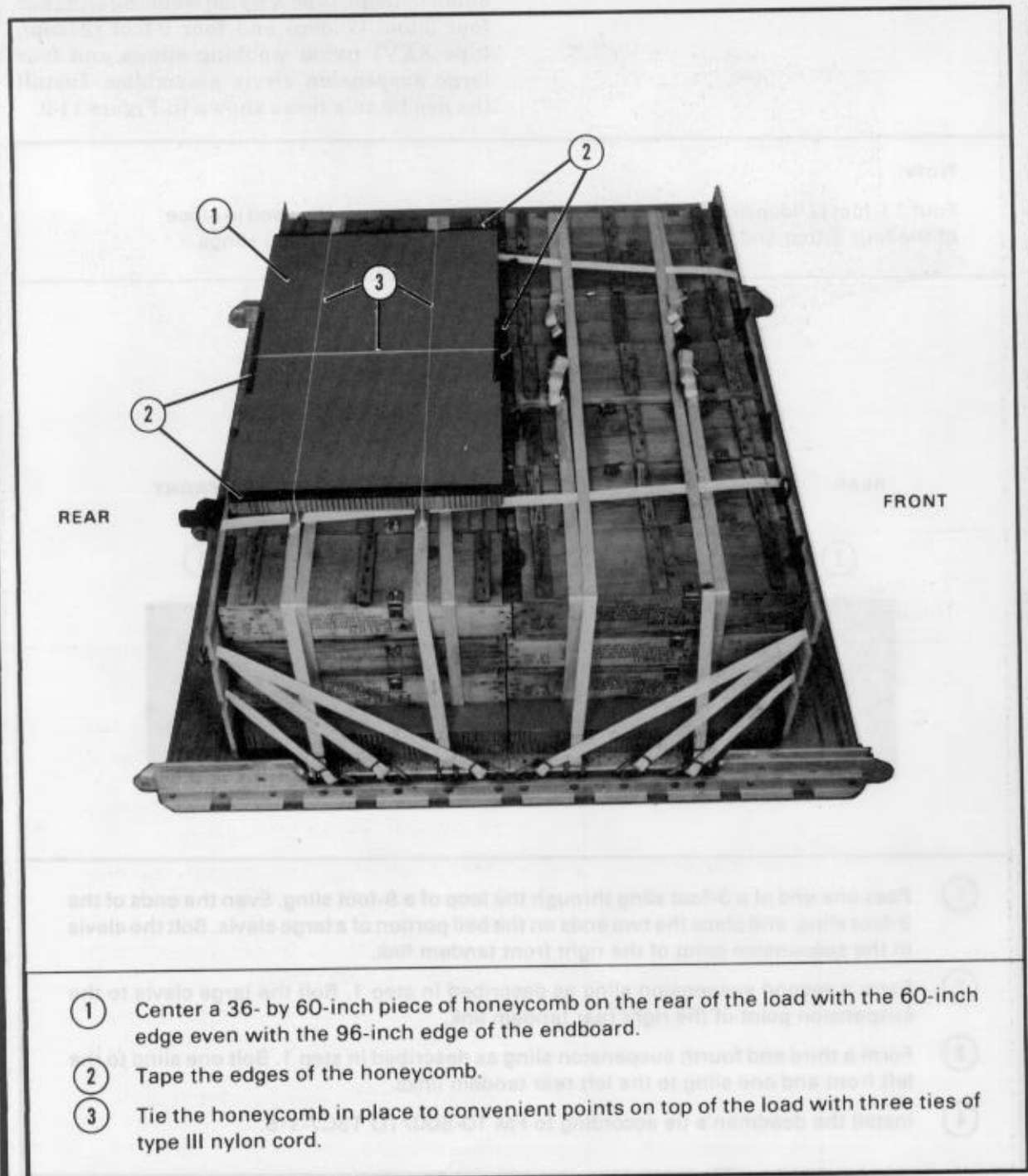


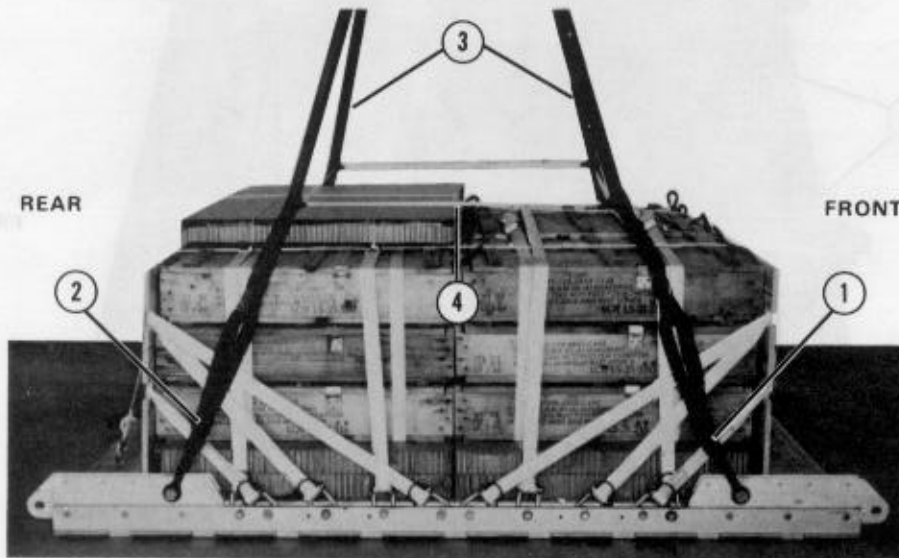
Figure 11-8. Parachute stowage platform installed

11-8. Installing Suspension Slings and Deadman's Tie

Install the suspension slings as shown in Figure 11-9 using four 3-foot (3-loop) and four 9-foot (3-loop), type X nylon webbing slings or four 3-foot (2-loop) and four 9-foot (2-loop), type XXVI nylon webbing slings and four large suspension clevis assemblies. Install the deadman's tie as shown in Figure 11-9.

Note:

Four 11-foot (2-loop or 3-loop), type X nylon webbing slings can be used in place of the four 3-foot and four 9-foot, type X or type XXVI nylon webbing slings.

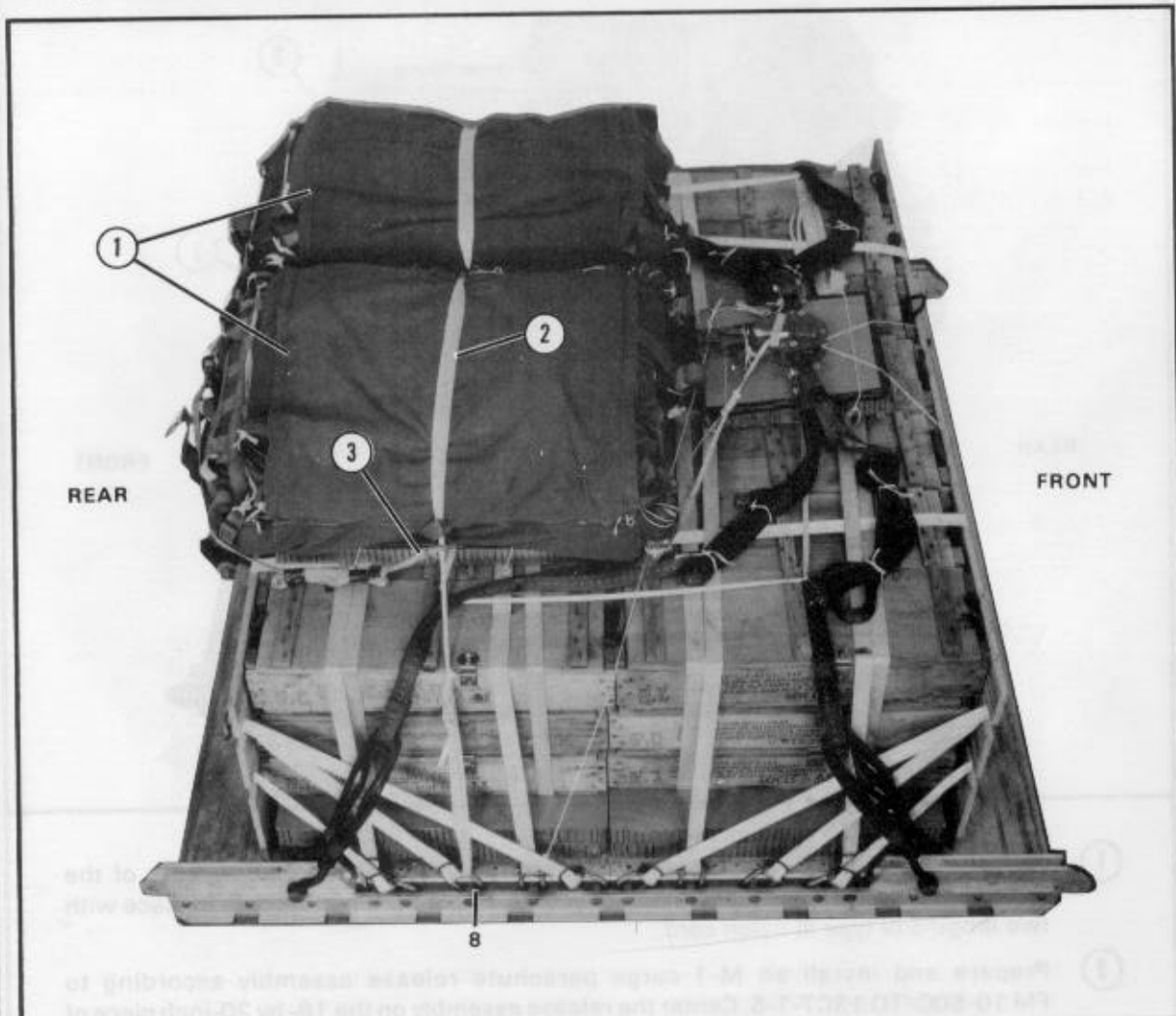


- ① Pass one end of a 3-foot sling through the loop of a 9-foot sling. Even the ends of the 3-foot sling, and place the two ends on the bell portion of a large clevis. Bolt the clevis to the suspension point of the right front tandem link.
- ② Form a second suspension sling as described in step 1. Bolt the large clevis to the suspension point of the right rear tandem link.
- ③ Form a third and fourth suspension sling as described in step 1. Bolt one sling to the left front and one sling to the left rear tandem links.
- ④ Install the deadman's tie according to FM 10-500/TO 13C7-1-5.

Figure 11-9. Suspension slings and deadman's tie installed

11-9. Installing Parachutes

Compute the parachute requirements for the load being rigged. Select the correct number of G-11A or G-11B cargo parachutes. The load in Figure 11-10 shows two G-11A cargo parachutes. Install the parachutes as shown in Figure 11-10.

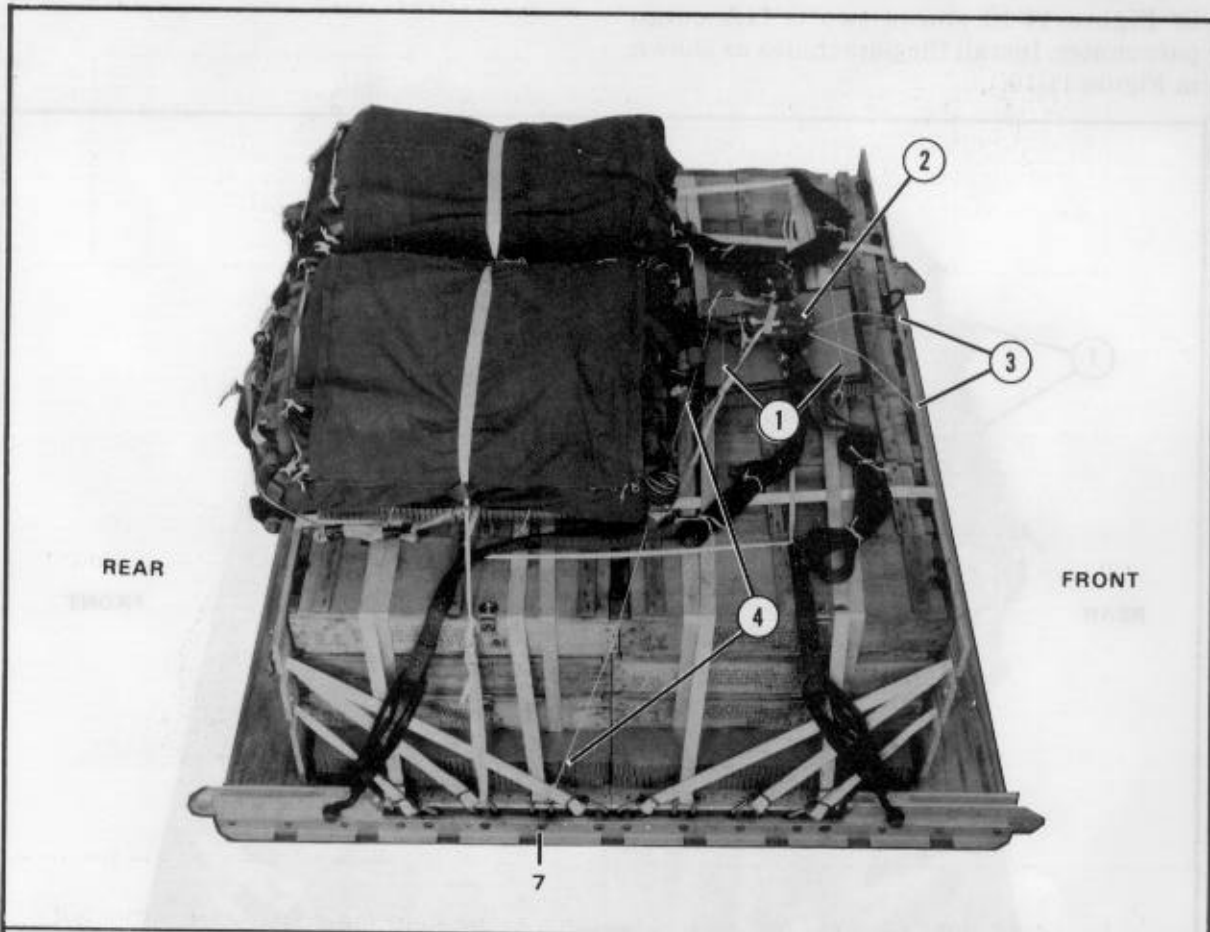


- ① Prepare two G-11A cargo parachutes according to FM 10-500/TO 13C7-1-5. Place the parachutes on the parachute stowage platform.
- ② Install a 10-yard, type VIII nylon webbing parachute restraint strap according to FM 10-500/TO 13C7-1-5. Secure the parachute restraint strap to clevises 8 and 8A.
- ③ Install a parachute release strap according to FM 10-500/TO 13C7-1-5.

Figure 11-10. Parachutes installed

11-10. Installing Release System

Install and safety an M-1 cargo parachute release assembly as shown in Figure 11-11.



- ① Center an 18- by 20-inch piece of honeycomb on top of the load in front of the parachutes. Tape the edges of the honeycomb. Secure the honeycomb in place with two lengths of type III nylon cord.
- ② Prepare and install an M-1 cargo parachute release assembly according to FM 10-500/TO 13C7-1-5. Center the release assembly on the 18- by 20-inch piece of honeycomb.
- ③ Secure the bottom of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to tiedown rings A1 and B1.
- ④ Secure the top of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to clevises 7 and 7A.

Figure 11-11. Release assembly installed

11-11. Installing Extraction System

Install the EFTC extraction system as shown in Figure 11-12.

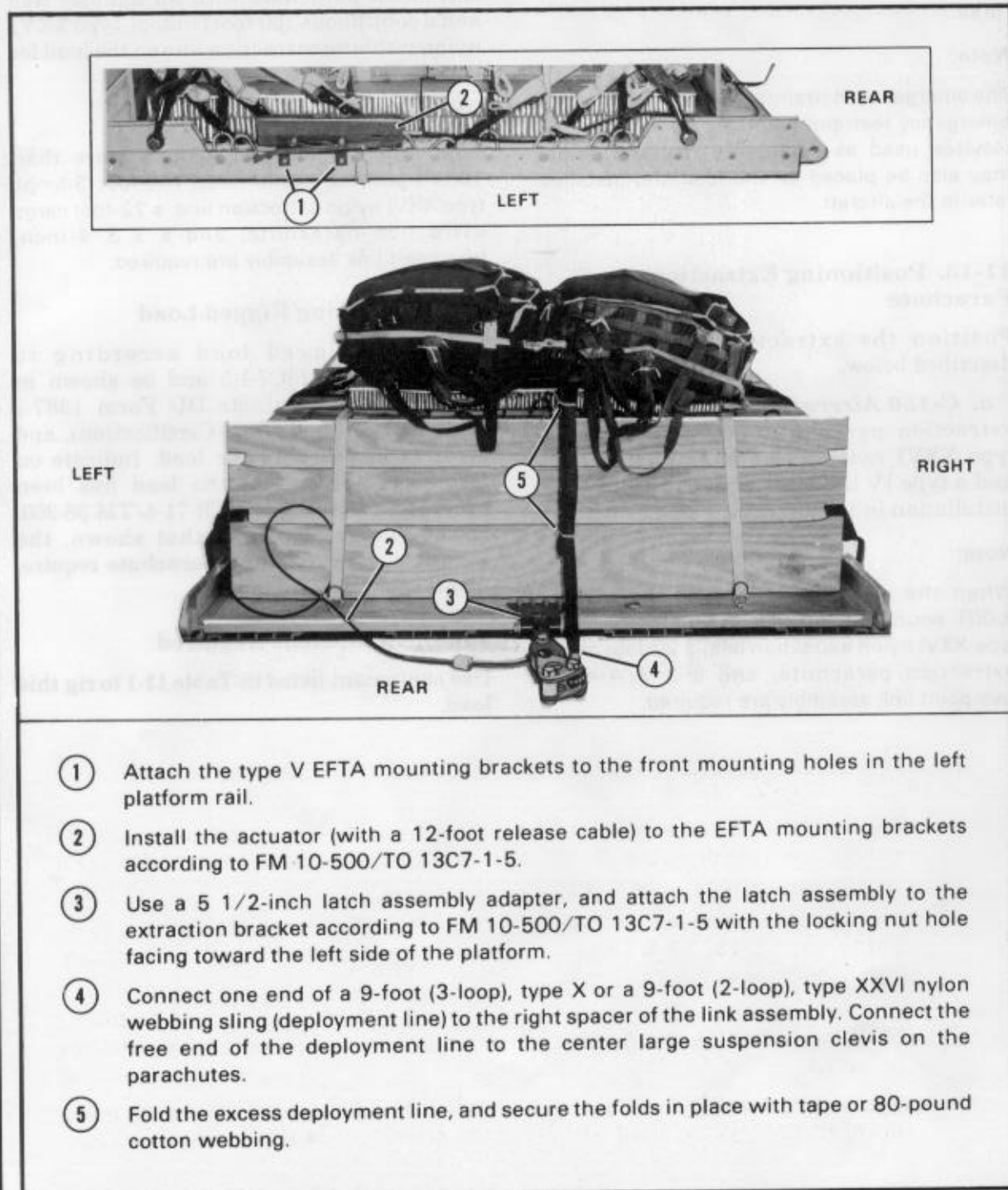


Figure 11-12. Extraction system installed

11-12. Installing Provisions for Emergency Restraints

Attach a medium (3/4-inch) suspension clevis to the front hole on the front tandem links.

Note:

The emergency restraints will be installed to the emergency restraint points in the aircraft. The clevises used as emergency restraint points may also be placed on the load and installed later in the aircraft.

11-13. Positioning Extraction Parachute

Position the extraction parachute as described below.

a. C-130 Aircraft. Place a 15-foot cargo extraction parachute; a 60-foot (1-loop), type XXVI nylon webbing extraction line; and a type IV link assembly on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 8,001 pounds, a 60-foot (3-loop), type X or type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

b. C-141 Aircraft. Place a 15-foot cargo extraction parachute with an adapter web and a continuous 160-foot (1-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 10,001 pounds, a continuous 140-foot (3-loop), type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

11-14. Marking Rigged Load

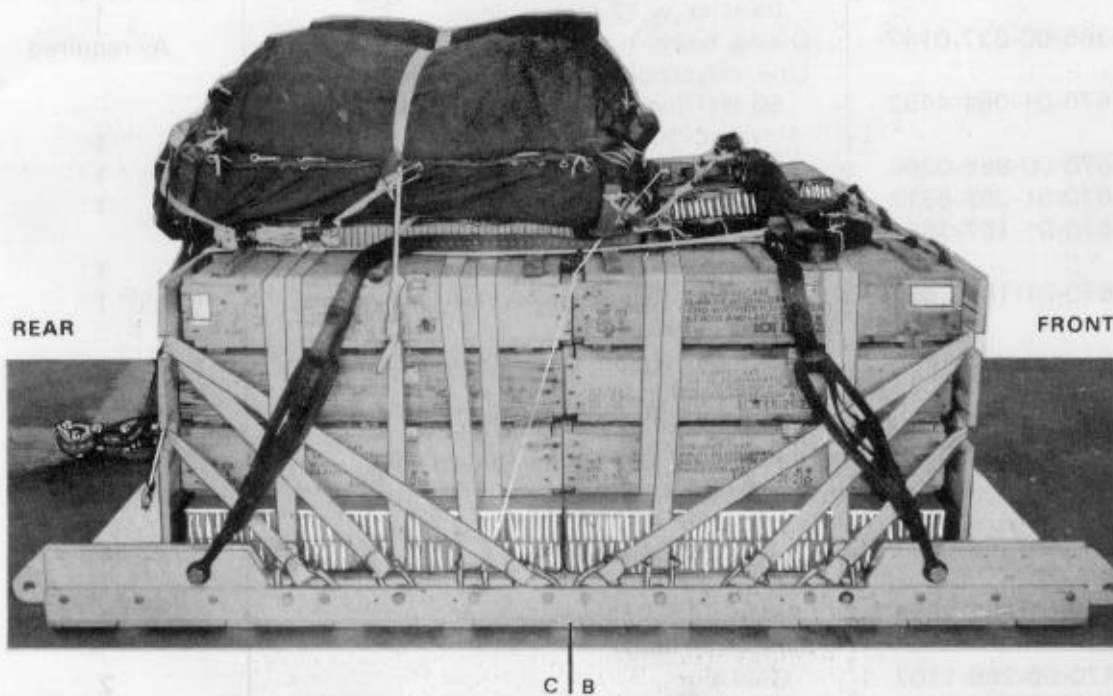
Mark the rigged load according to FM 10-500/TO 13C7-1-5 and as shown in Figure 11-13. Complete DD Form 1387-2 (Special Handling Data/Certification), and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

11-15. Equipment Required

Use equipment listed in Table 11-1 to rig this load.

CAUTION

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



RIGGED LOAD DATA

Weight:	Load shown	6,344 pounds
	Maximum allowable	10,500 pounds
Height		56 inches
Width		108 inches
Length		119 inches
Overhang (Rear).....		18 inches
CB (from front edge of platform)		50 inches
Extraction system (shown)		EFTC

Figure 11-13. Bulk supply load rigged on a type V platform for low-velocity airdrop

Table 11-1. Equipment required for rigging typical supply loads on a type V platform for low-velocity airdrop

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)	4
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5783	Coupling, airdrop, extraction force transfer, w 12-foot cable	1
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI nylon webbing (for C-130) <u>or</u>	1
1670-00-856-0266	60-ft (3-loop), type X nylon webbing <u>or</u>	1
1670-01-062-6313	60-ft (3-loop), type XXVI nylon webbing	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141) <u>or</u>	1
1670-01-107-7652	160-ft (1-loop), type XXVI nylon webbing	1
	Link assembly:	
1670-00-003-1953	Two-point, plate side, 3 3/4-inch (for extraction line)	1
1670-00-783-5988	Type IV (for extraction line)	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	5 sheets
	18- by 20-in	(1)
	36- by 60-in	(1)
	36- by 96-in	(4)
1670-01-183-2678	Leaf, extraction line (line bag)	2
	Parachute, cargo:	
1670-00-269-1107	G-11A <u>or</u>	2
1670-01-016-7841	G-11B	1
	Parachute, cargo extraction:	
1670-00-052-1548	15-ft <u>or</u>	1
1670-01-063-3715	15-ft (new)	1
1670-00-687-5458	22-ft <u>or</u>	1
1670-01-063-3716	22-ft (new)	1
	Platform, AD, type V, 8-ft:	
	Bracket:	
1670-01-162-2375	Inside EFTA	1
1670-01-162-2374	Outside EFTA	1
1670-01-162-2385	Bumper, nose	1
1670-01-162-2372	Clevis, load tiedown	20
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-in	2 sheets
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 11-1. Equipment required for rigging typical supply loads on a type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
	Sling, cargo, airdrop:	
1670-00-753-3788	3-ft (3-loop), type X nylon webbing <u>or</u>	4
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3631	9-ft (3-loop), type X nylon webbing <u>or</u>	4
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3791	11-ft (2-loop), type X nylon webbing <u>or</u>	4
1670-00-823-5040	11-ft (3-loop), type X nylon webbing	4
1670-00-753-3794	20-ft (2-loop), type X nylon webbing (riser extensions) <u>or</u>	2
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	12
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in, 1,000-lb, natural	As required
8305-00-263-3591	Nylon, type VIII, 3,600-lb	As required

Section II

RIGGING BULK SUPPLIES IN A-22 CARGO BAGS

11-16. Description of Load

This section shows and tells how to rig bulk supplies in four A-22 cargo bags. The A-22 cargo bags are positioned on an 8-foot, type V platform.

11-17. Preparing Platform

Prepare an 8-foot, type V platform as described in paragraph 11-2 and as shown in Figure 11-1.

11-18. Building and Placing Honeycomb Stacks

Build the honeycomb stacks and place them on the platform as shown in Figure 11-14.

Note:

When rigging this load for airdrop on a drop zone with ground elevation of 6,000 to 10,000 feet, add another layer of honeycomb to each stack.

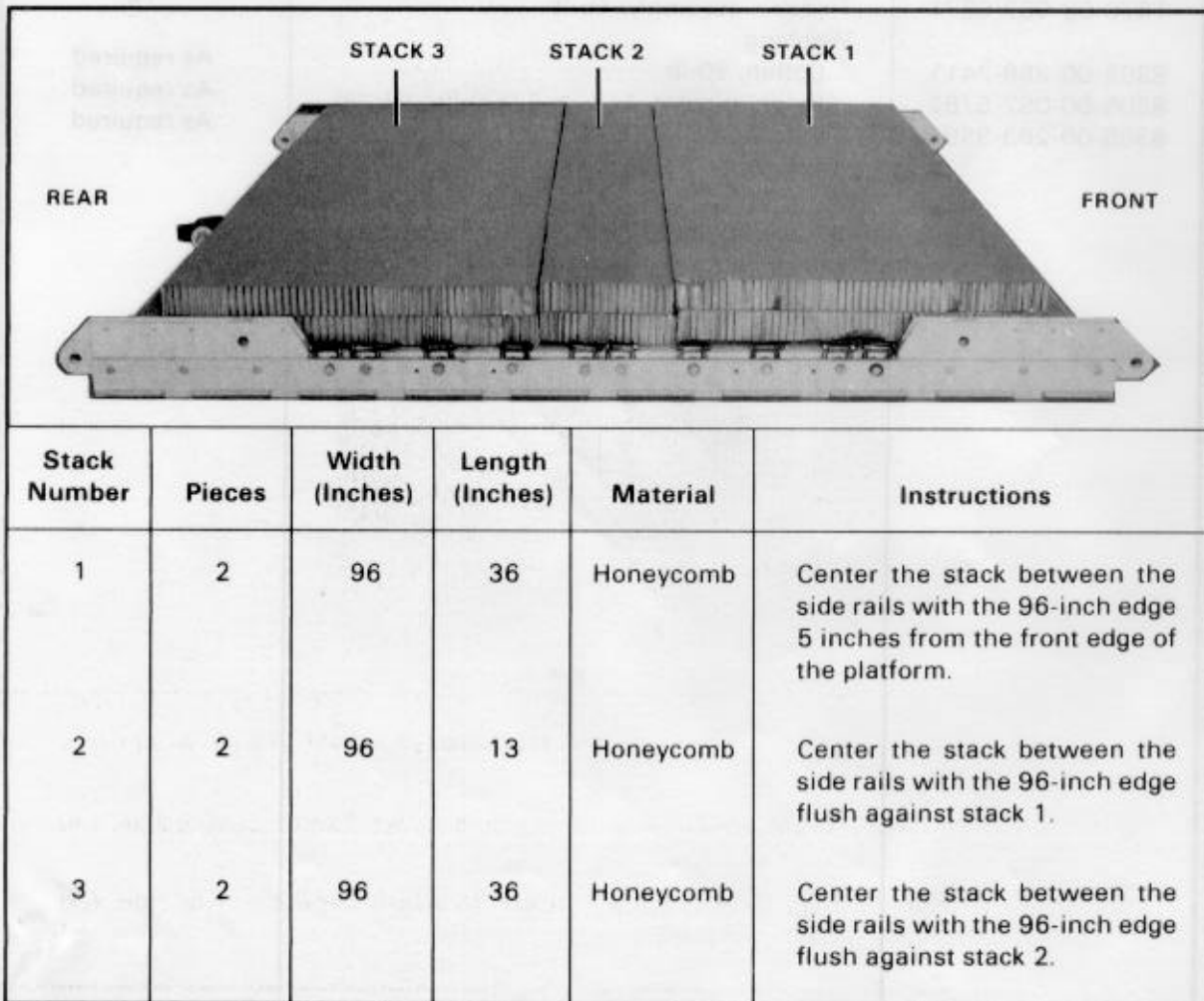


Figure 11-14. Honeycomb stacks prepared and positioned

11-19. Stowing Load in A-22 Cargo Bags

CAUTION

Only ammunition listed in FM 10-553/TO 13C7-18-41 may be airdropped. Hazardous material must be packaged, marked, and labeled as required by AFR 71-4/TM 38-250.

Prepare, stow, and rig the load in four A-22 cargo bags according to FM 10-501/TO 13C7-1-11 with the following exceptions:

a. Do NOT prepare and install the skid.

b. Do NOT install the parachutes on the A-22 cargo bags.

11-20. Positioning Load

Position the four A-22 cargo bags on the honeycomb stacks as shown in Figure 11-15.

11-21. Installing Lashings

Use twelve 15-foot tiedown straps, 12 D-rings, and 12 load binders. Lash the load to the platform according to FM 10-500/TO 13C7-1-5 and as shown in Figures 11-16 through 11-19.

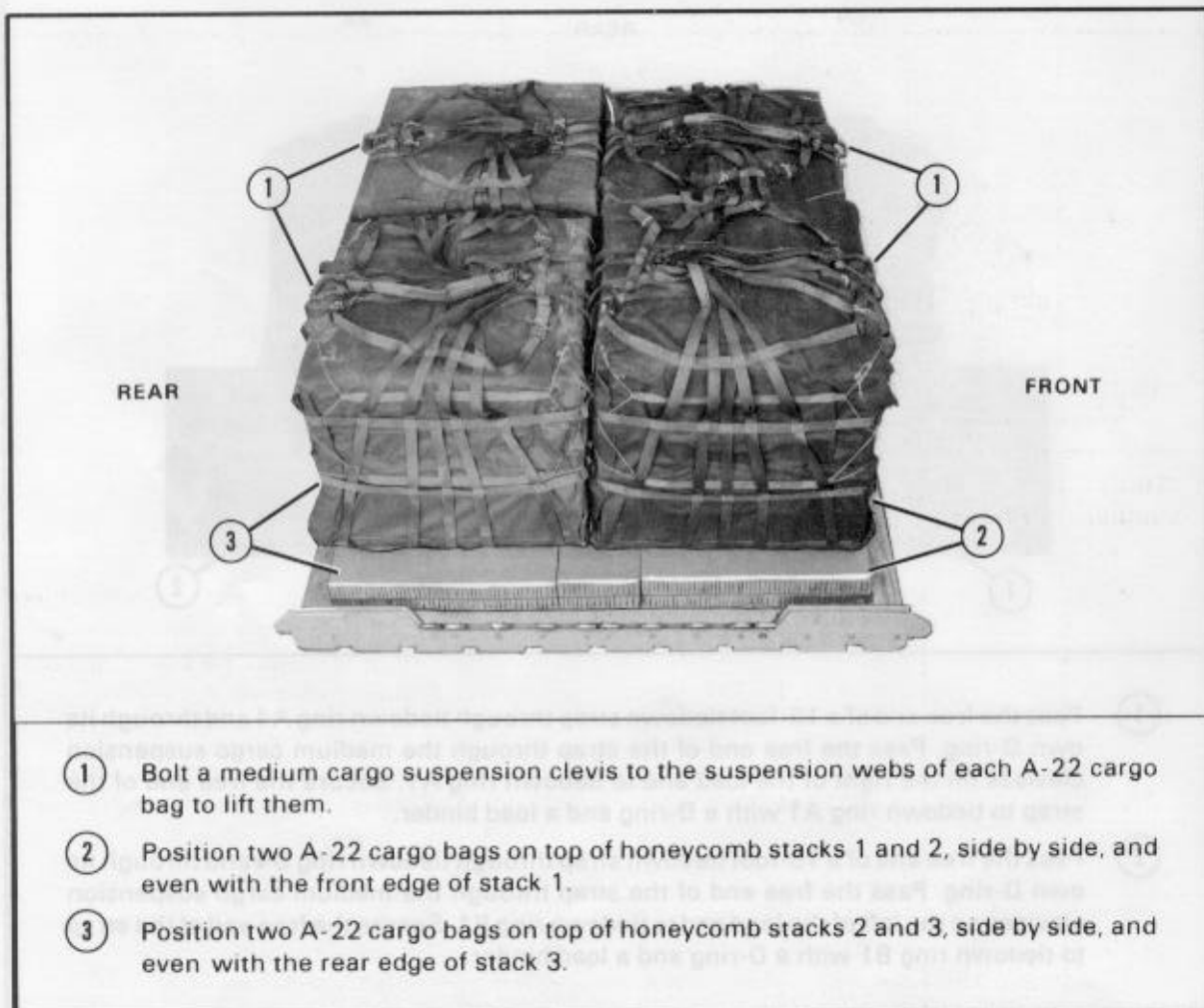
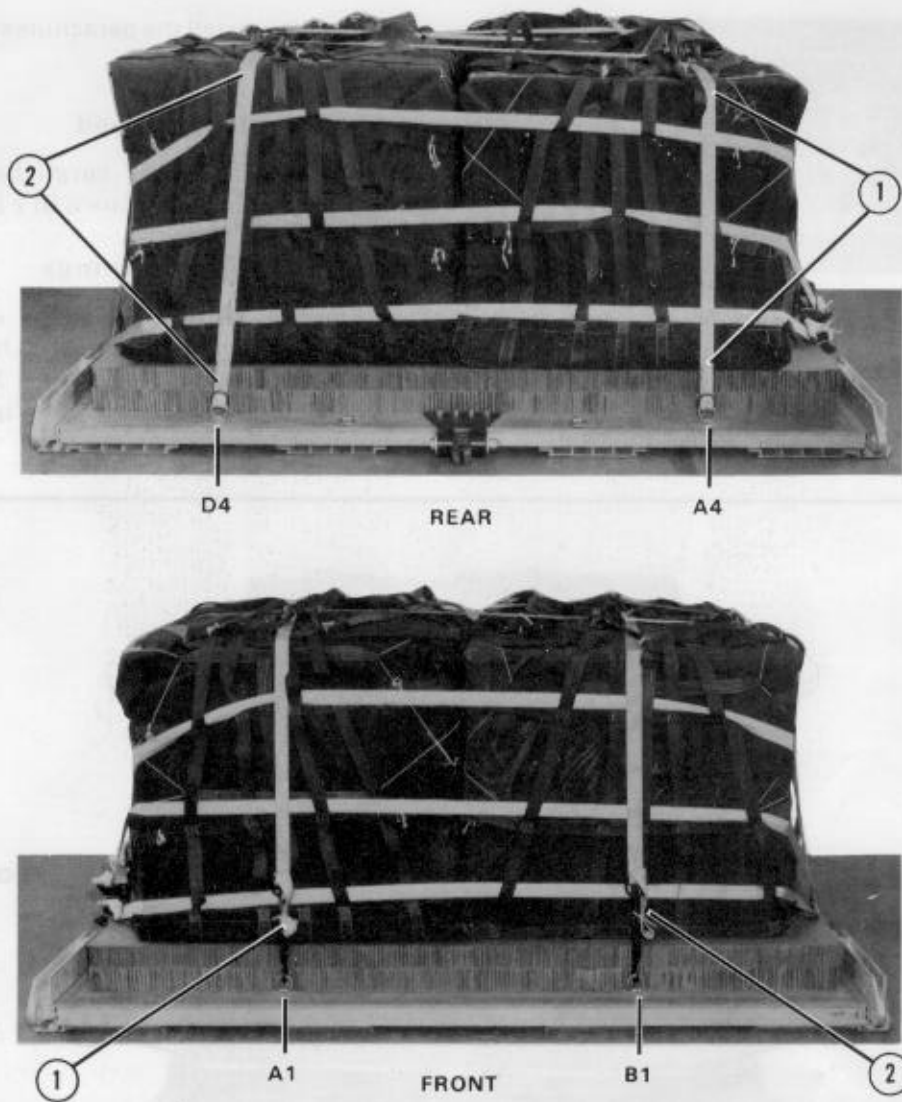


Figure 11-15. Load positioned



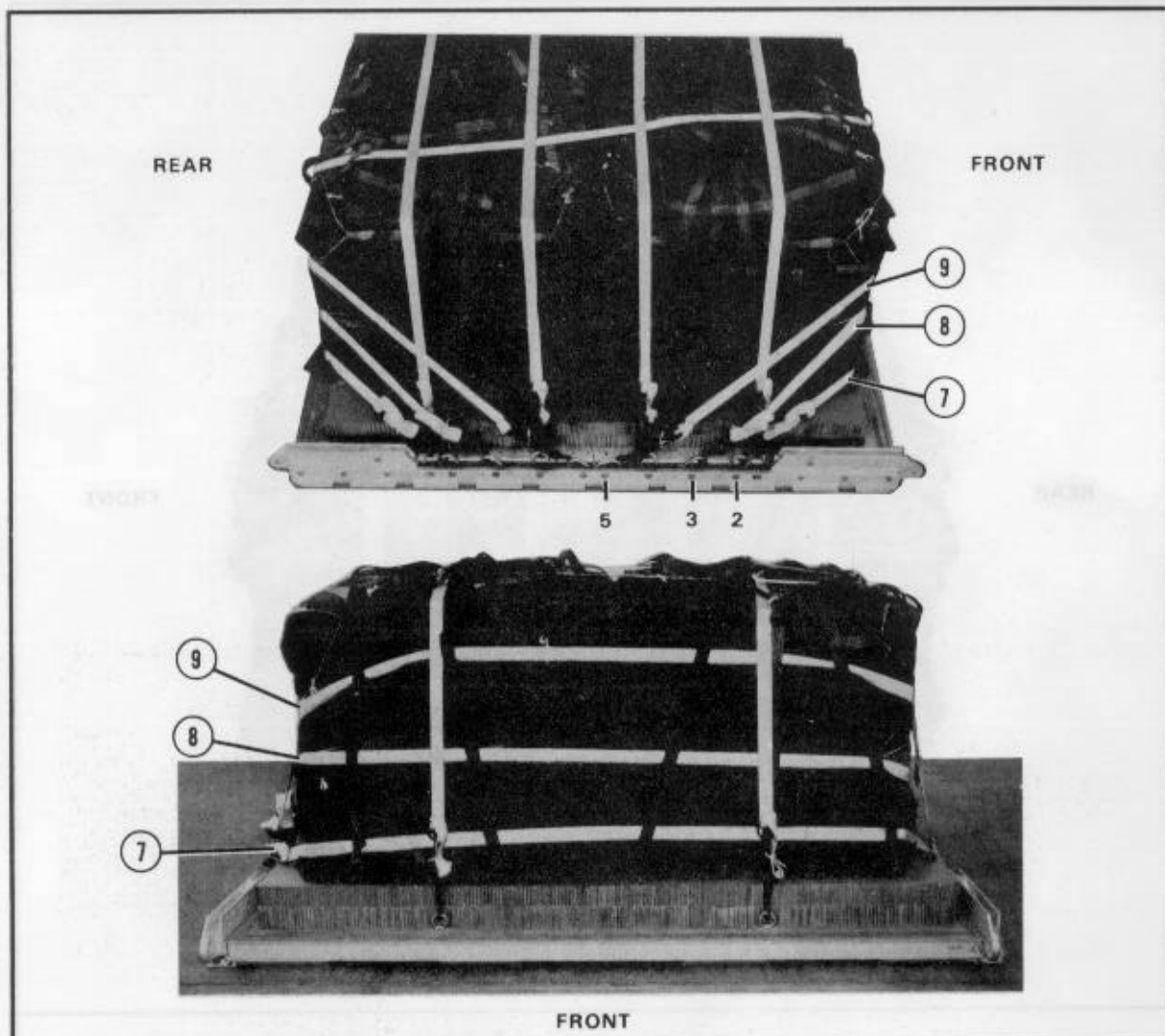
- ① Pass the free end of a 15-foot tiedown strap through tiedown ring A4 and through its own D-ring. Pass the free end of the strap through the medium cargo suspension clevises on the right of the load and to tiedown ring A1. Secure the free end of the strap to tiedown ring A1 with a D-ring and a load binder.
- ② Pass the free end of a 15-foot tiedown strap through tiedown ring D4 and through its own D-ring. Pass the free end of the strap through the medium cargo suspension clevises on the left of the load and to tiedown ring B1. Secure the free end of the strap to tiedown ring B1 with a D-ring and a load binder.

Figure 11-16. Lashings 1 and 2 installed



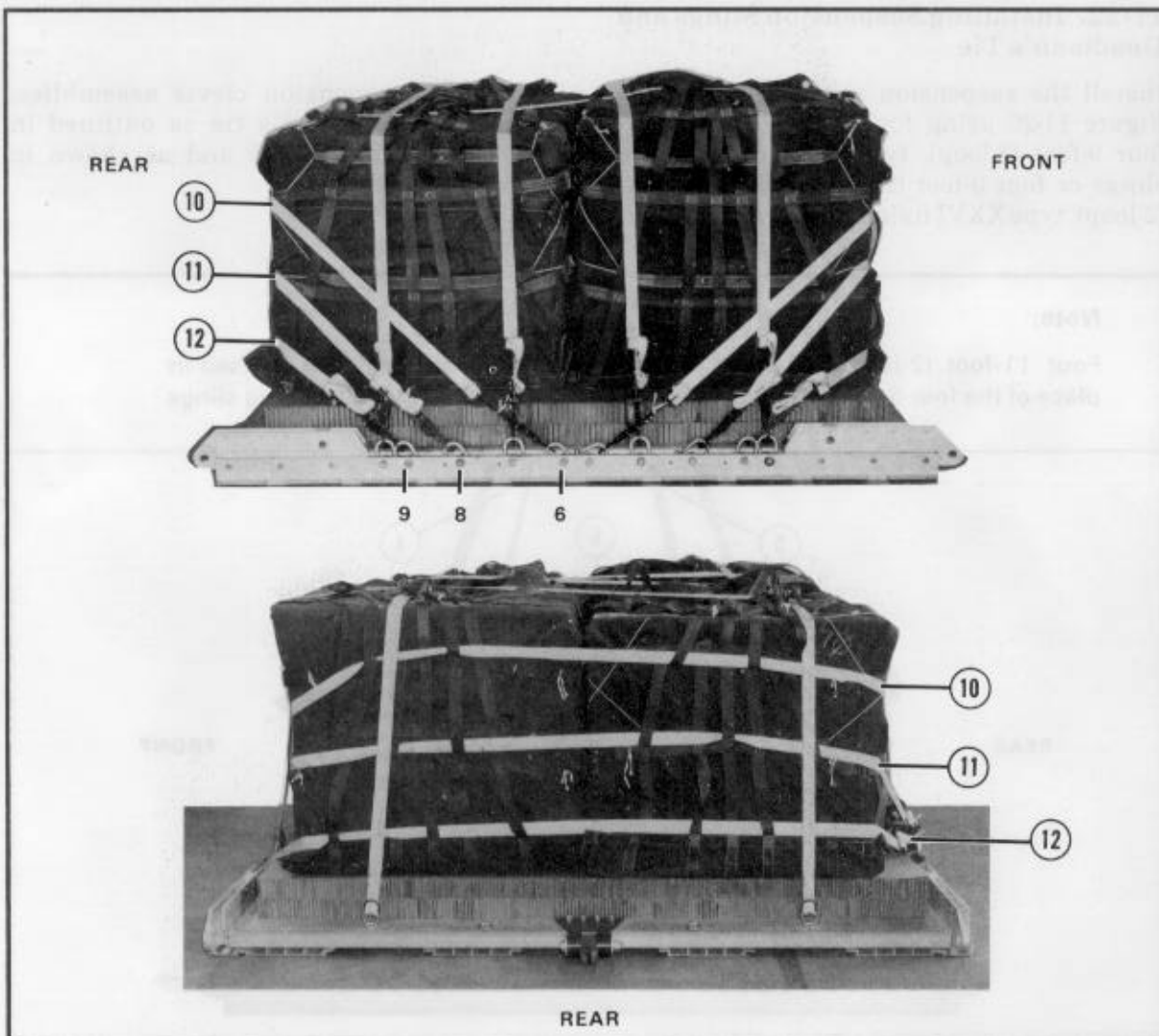
- ③ Pass the free end of a 15-foot tiedown strap through clevis 1A and through its own D-ring. Pass the free end of the strap over the top of the load to clevis 1. Secure the free end of the strap to clevis 1 with a D-ring and a load binder.
- ④ Pass the free end of a 15-foot tiedown strap through clevis 4A and through its own D-ring. Pass the free end of the strap over the top of the load to clevis 4. Secure the free end of the strap to clevis 4 with a D-ring and a load binder.
- ⑤ Pass the free end of a 15-foot tiedown strap through clevis 7A and through its own D-ring. Pass the free end of the strap over the top of the load to clevis 7. Secure the free end of the strap to clevis 7 with a D-ring and a load binder.
- ⑥ Pass the free end of a 15-foot tiedown strap through clevis 10A and through its own D-ring. Pass the free end of the strap over the top of the load to clevis 10. Secure the free end of the strap to clevis 10 with a D-ring and a load binder.

Figure 11-17. Lashings 3 through 6 installed



- ⑦ Pass the free end of a 15-foot tiedown strap through clevis 2A and through its own D-ring. Pass the free end of the strap around the front of the load (through the webbing of the A-22 cargo assembly) to clevis 2. Secure the free end of the strap to clevis 2 with a D-ring and a load binder.
- ⑧ Pass the free end of a 15-foot tiedown strap through clevis 3A and through its own D-ring. Pass the free end of the strap around the front of the load (through the webbing of the A-22 cargo assembly) to clevis 3. Secure the free end of the strap to clevis 3 with a D-ring and a load binder.
- ⑨ Pass the free end of a 15-foot tiedown strap through clevis 5A and through its own D-ring. Pass the free end of the strap around the front of the load (through the webbing of the A-22 cargo assembly) to clevis 5. Secure the free end of the strap to clevis 5 with a D-ring and a load binder.

Figure 11-18. Lashings 7 through 9 installed



- ⑩ Pass the free end of a 15-foot tiedown strap through clevis 6A and through its own D-ring. Pass the free end of the strap around the rear of the load (through the webbing of the A-22 cargo assembly) to clevis 6. Secure the free end of the strap to clevis 6 with a D-ring and a load binder.
- ⑪ Pass the free end of a 15-foot tiedown strap through clevis 8A and through its own D-ring. Pass the free end of the strap around the rear of the load (through the webbing of the A-22 cargo assembly) to clevis 8. Secure the free end of the strap to clevis 8 with a D-ring and a load binder.
- ⑫ Pass the free end of a 15-foot tiedown strap through clevis 9A and through its own D-ring. Pass the free end of the strap around the rear of the load (through the webbing of the A-22 cargo assembly) to clevis 9. Secure the free end of the strap to clevis 9 with a D-ring and a load binder.

Figure 11-19. Lashings 10 through 12 installed

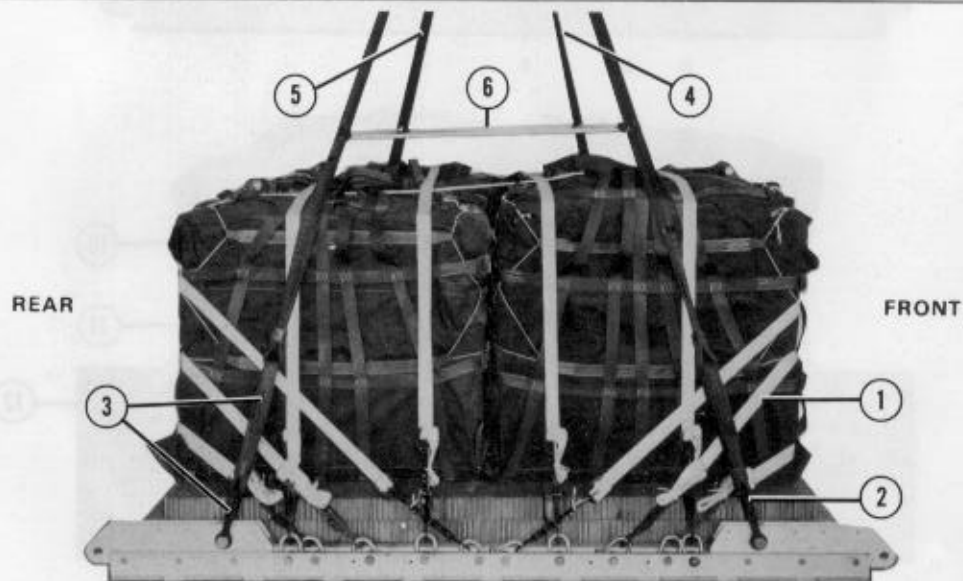
11-22. Installing Suspension Slings and Deadman's Tie

Install the suspension slings as shown in Figure 11-20 using four 3-foot (3-loop) and four 9-foot (3-loop), type X nylon webbing slings or four 3-foot (2-loop) and four 9-foot (2-loop), type XXVI nylon webbing slings and

four large suspension clevis assemblies. Install the deadman's tie as outlined in FM 10-500/TO 13C7-1-5 and as shown in Figure 11-20.

Note:

Four 11-foot (2-loop or 3-loop), type X nylon webbing slings can be used in place of the four 3-foot and four 9-foot, type X or type XXVI nylon webbing slings.

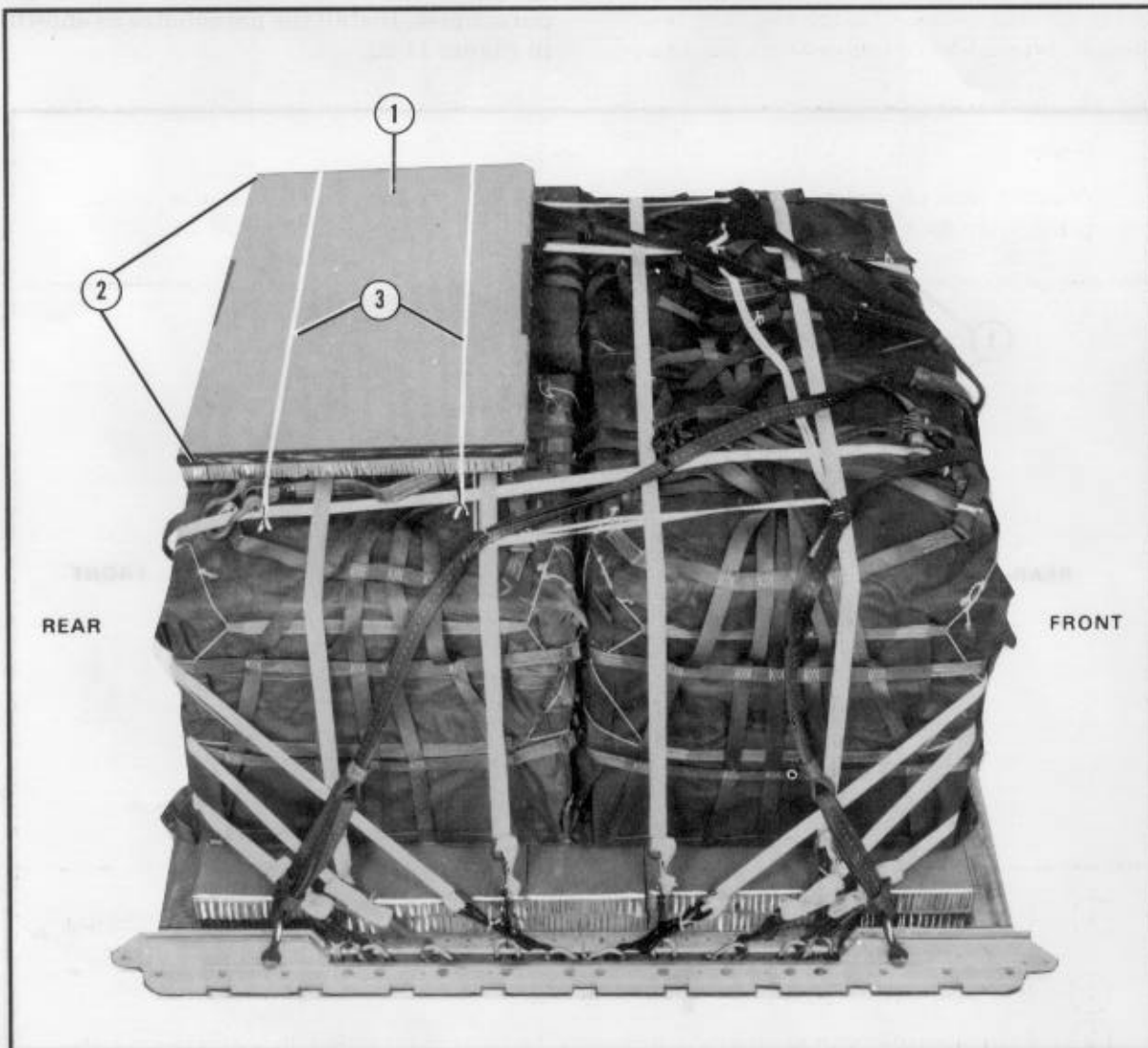


- ① Pass one end of a 3-foot sling through the loop of a 9-foot sling. Even the ends of the 3-foot sling, and attach both ends of the 3-foot sling to a large suspension clevis.
- ② Bolt the clevis to the right front tandem link.
- ③ Form a suspension sling and install it on the right rear tandem link by adapting the procedures in steps 1 and 2.
- ④ Form a suspension sling and install it on the left front tandem link by adapting the procedures in steps 1 and 2.
- ⑤ Form a suspension sling and install it on the left rear tandem link by adapting the procedures in steps 1 and 2.
- ⑥ Install a deadman's tie according to FM 10-500/TO 13C7-1-5.

Figure 11-20. Suspension slings and deadman's tie installed

11-23. Installing Parachute Stowage Platform

Install a parachute stowage platform as shown in Figure 11-21.

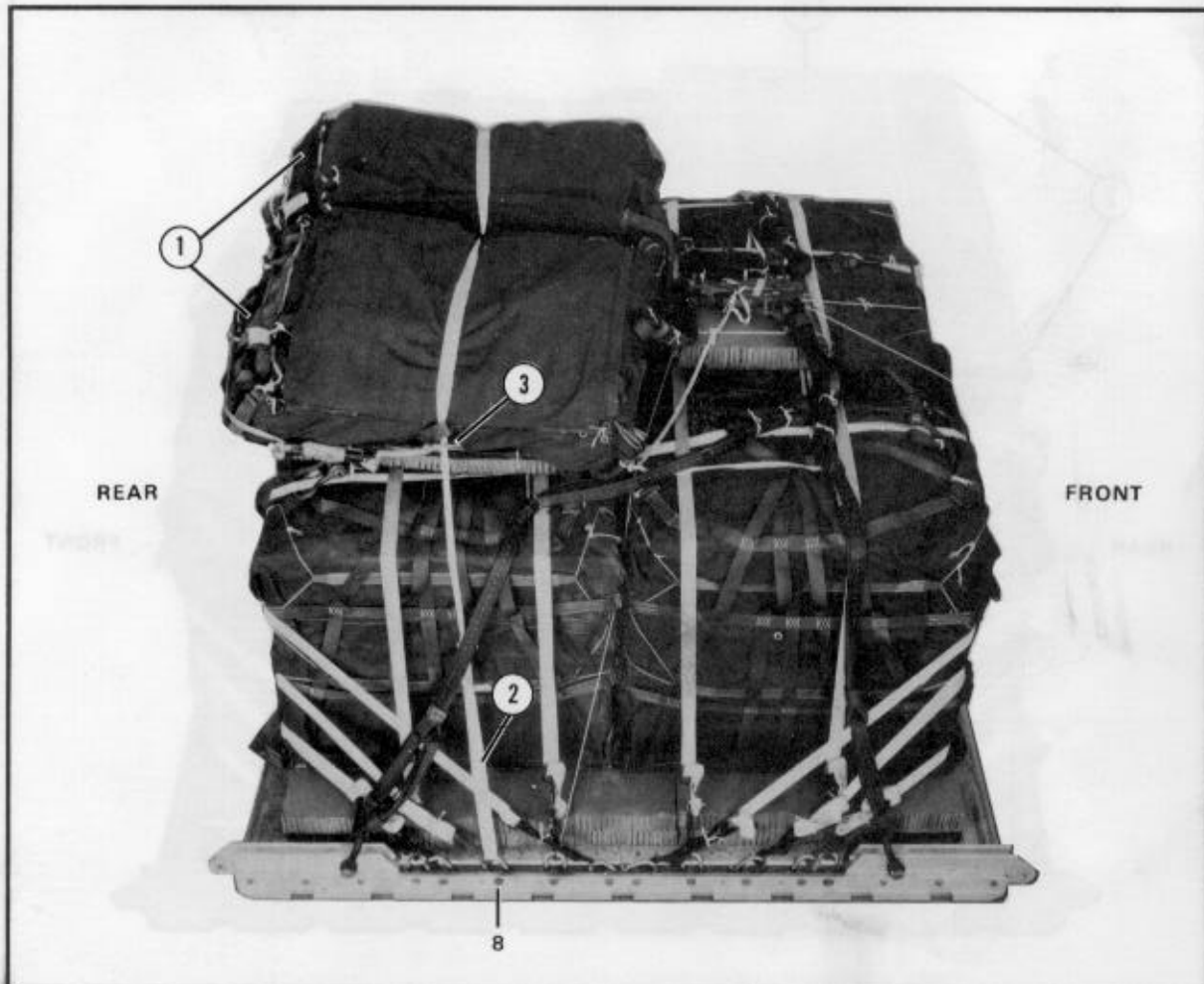


- ① Center a 36- by 60-inch piece of honeycomb on the rear of the load with the 60-inch edge even with the rear edge of the A-22 containers.
- ② Tape the edges of the honeycomb.
- ③ Tie the honeycomb in place to convenient points on top of the load with two ties of type III nylon cord.

Figure 11-21. Parachute stowage platform installed

11-24. Installing Parachutes

Compute parachute requirements for the load being rigged. Select the correct number of G-11A or G-11B cargo parachutes. The load in Figure 11-22 shows two G-11A cargo parachutes. Install the parachutes as shown in Figure 11-22.

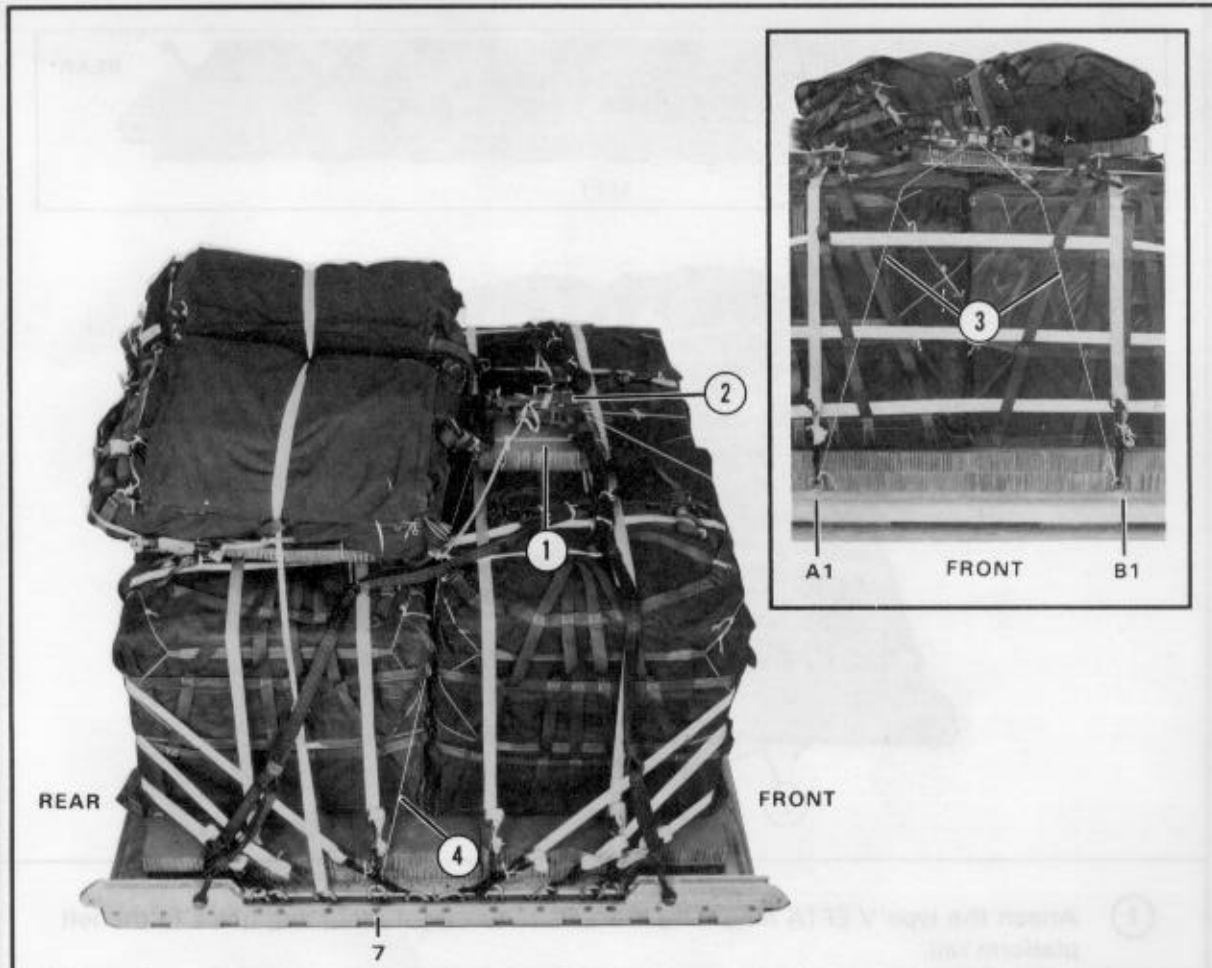


- ① Prepare two G-11A cargo parachutes according to FM 10-500/TO 13C7-1-5. Place the parachutes on the parachute stowage platform.
- ② Install a parachute restraint strap according to FM 10-500/TO 13C7-1-5. Secure the parachute restraint strap to clevises 8 and 8A.
- ③ Install the parachute release strap according to FM 10-500/TO 13C7-1-5.

Figure 11-22. Parachutes installed

11-25. Installing Release System

Install and safety the M-1 cargo parachute release assembly as shown in Figure 11-23.

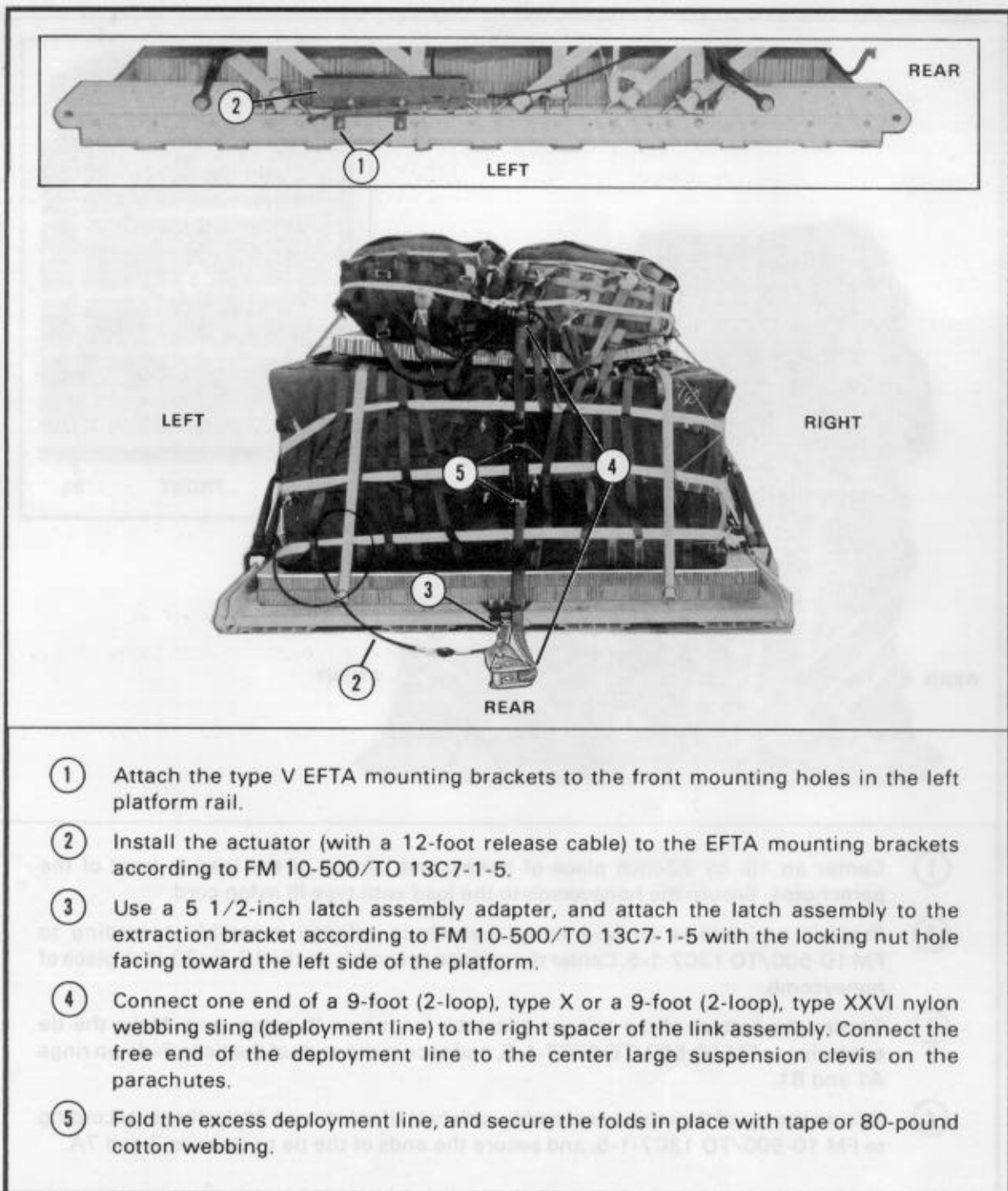


- ① Center an 18- by 20-inch piece of honeycomb on top of the load in front of the parachutes. Secure the honeycomb to the load with type III nylon cord.
- ② Prepare and install an M-1 cargo parachute release assembly according to FM 10-500/TO 13C7-1-5. Center the release assembly on the 18- by 20-inch piece of honeycomb.
- ③ Secure the bottom of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to tiedown rings A1 and B1.
- ④ Secure the top of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to clevises 7 and 7A.

Figure 11-23. Release assembly installed

11-26. Installing Extraction System

Install the EFTC extraction system as shown in Figure 11-24.



- ① Attach the type V EFTA mounting brackets to the front mounting holes in the left platform rail.
- ② Install the actuator (with a 12-foot release cable) to the EFTA mounting brackets according to FM 10-500/TO 13C7-1-5.
- ③ Use a 5 1/2-inch latch assembly adapter, and attach the latch assembly to the extraction bracket according to FM 10-500/TO 13C7-1-5 with the locking nut hole facing toward the left side of the platform.
- ④ Connect one end of a 9-foot (2-loop), type X or a 9-foot (2-loop), type XXVI nylon webbing sling (deployment line) to the right spacer of the link assembly. Connect the free end of the deployment line to the center large suspension clevis on the parachutes.
- ⑤ Fold the excess deployment line, and secure the folds in place with tape or 80-pound cotton webbing.

Figure 11-24. Extraction system installed

11-27. Installing Provisions for Emergency Restraints

Attach a medium (3/4-inch) suspension clevis to the front hole on the front tandem links.

Note:

The emergency restraints will be installed to the emergency restraint points in the aircraft. The clevises used as emergency restraint points may also be placed on the load and installed later in the aircraft.

11-28. Positioning Extraction Parachute

Position the extraction parachute as described below.

a. C-130 Aircraft. Place a 15-foot cargo extraction parachute; a 60-foot (1-loop), type XXVI nylon webbing extraction line; and a type V link assembly on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 8,001 pounds, a 60-foot (3-loop), type X or type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

b. C-141 Aircraft. Place a 15-foot cargo extraction parachute with an adapter web and a continuous 160-foot (1-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 10,001 pounds, a continuous 140-foot (3-loop), type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

11-29. Marking Rigged Load

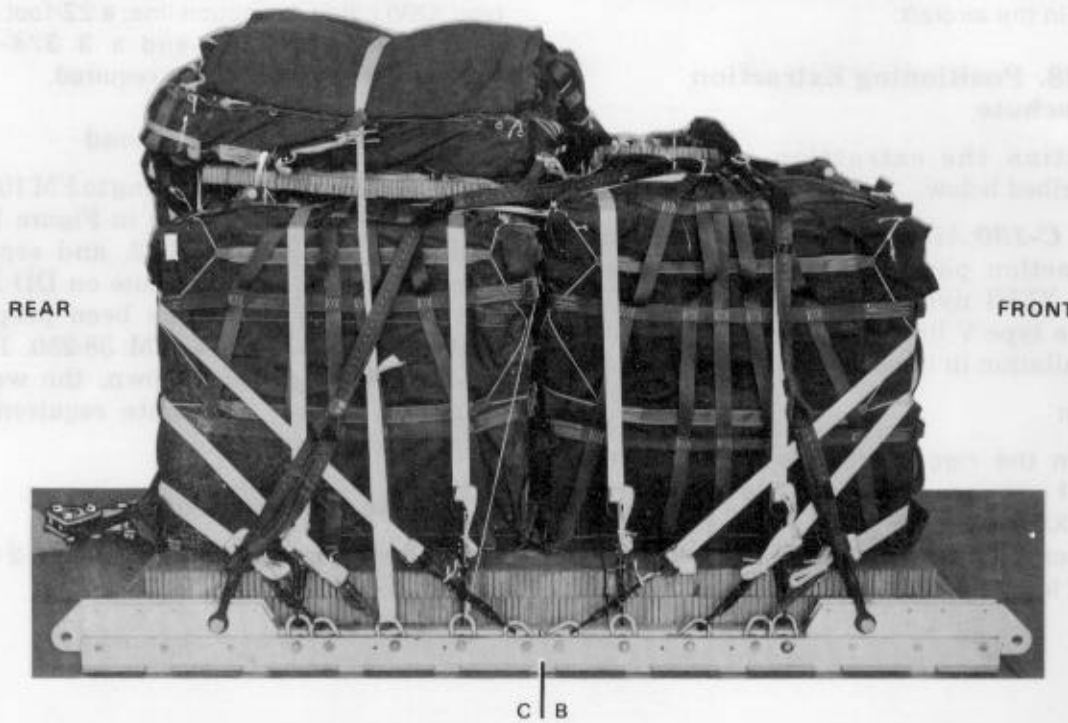
Mark the rigged load according to FM 10-500/TO 13C7-1-5 and as shown in Figure 11-25. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

11-30. Equipment Required

Use the equipment listed in Table 11-2 to rig this load.

CAUTION

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



RIGGED LOAD DATA

Weight:	Load shown	6,750 pounds
	Maximum allowable	10,500 pounds
Height		71 inches
Width		108 inches
Length		119 inches
Overhang (Rear)		18 inches
CB (from front edge of platform)		50 inches
Extraction system (shown)		EFTC

Figure 11-25. Bulk supplies rigged in A-22 cargo bags

Table 11-2. Equipment required for rigging typical supply loads in A-22 cargo bags on a type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
1670-00-587-3421	Bag, cargo, A-22	4
	Clevis, suspension:	
4030-00-678-8562	3/4-in (medium)	1
4030-00-090-5354	1-in (large)	4
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5783	Coupling, airdrop, extraction force transfer, w 12-foot cable	1
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI nylon webbing (for C-130) <u>or</u>	1
1670-00-856-0266	60-ft (3-loop), type X nylon webbing <u>or</u>	1
1670-01-062-6313	60-ft (3-loop), type XXVI nylon webbing	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141) <u>or</u>	1
1670-01-107-7652	160-ft (1-loop), type XXVI nylon webbing	1
	Link assembly:	
1670-00-217-2421	Link, L-bar type	2
1670-00-783-5988	Type IV (for extraction line)	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	5 sheets
	13- by 96-in	(2)
	18- by 20-in	(1)
	36- by 60-in	(1)
	36- by 96-in	(4)
1670-01-183-2678	Leaf, extraction line (line bag)	2
	Parachute, cargo:	
1670-00-269-1107	G-11A <u>or</u>	2
1670-01-016-7841	G-11B	1
	Parachute, cargo extraction:	
1670-00-052-1548	15-ft <u>or</u>	1
1670-01-063-3715	15-ft (new)	1
1670-00-687-5458	22-ft <u>or</u>	1
1670-01-063-3716	22-ft (new)	1
	Platform, AD, type V, 8-ft:	
	Bracket:	
1670-01-162-2375	Inside EFTA	1
1670-01-162-2374	Outside EFTA	1
1670-01-162-2385	Bumper, nose	1
1670-01-162-2372	Clevis, load tiedown	20
1670-01-162-2381	Tandem link	4
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 11-2. Equipment required for rigging typical supply loads in A-22 cargo bags on a type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
	Sling, cargo, airdrop:	
1670-00-753-3788	3-ft (3-loop), type X nylon webbing <u>or</u>	4
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3790	9-ft (2-loop), type X nylon webbing <u>or</u>	4
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3791	11-ft (2-loop), type X nylon webbing <u>or</u>	4
1670-00-823-5040	11-ft (3-loop), type X nylon webbing	4
1670-00-753-3794	20-ft (2-loop), type X nylon webbing	
	(riser extensions) <u>or</u>	2
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	12
1670-01-062-6312	Web, adapter, 36-in	16
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in, 1,000-lb, natural	As required
8305-00-263-3591	Nylon, type VIII, 3,600-lb	As required

CHAPTER 12

**RIGGING SUPPLY LOADS ON A 12-FOOT, TYPE V
PLATFORM FOR LOW-VELOCITY AIRDROP**

12-1. Description of Load

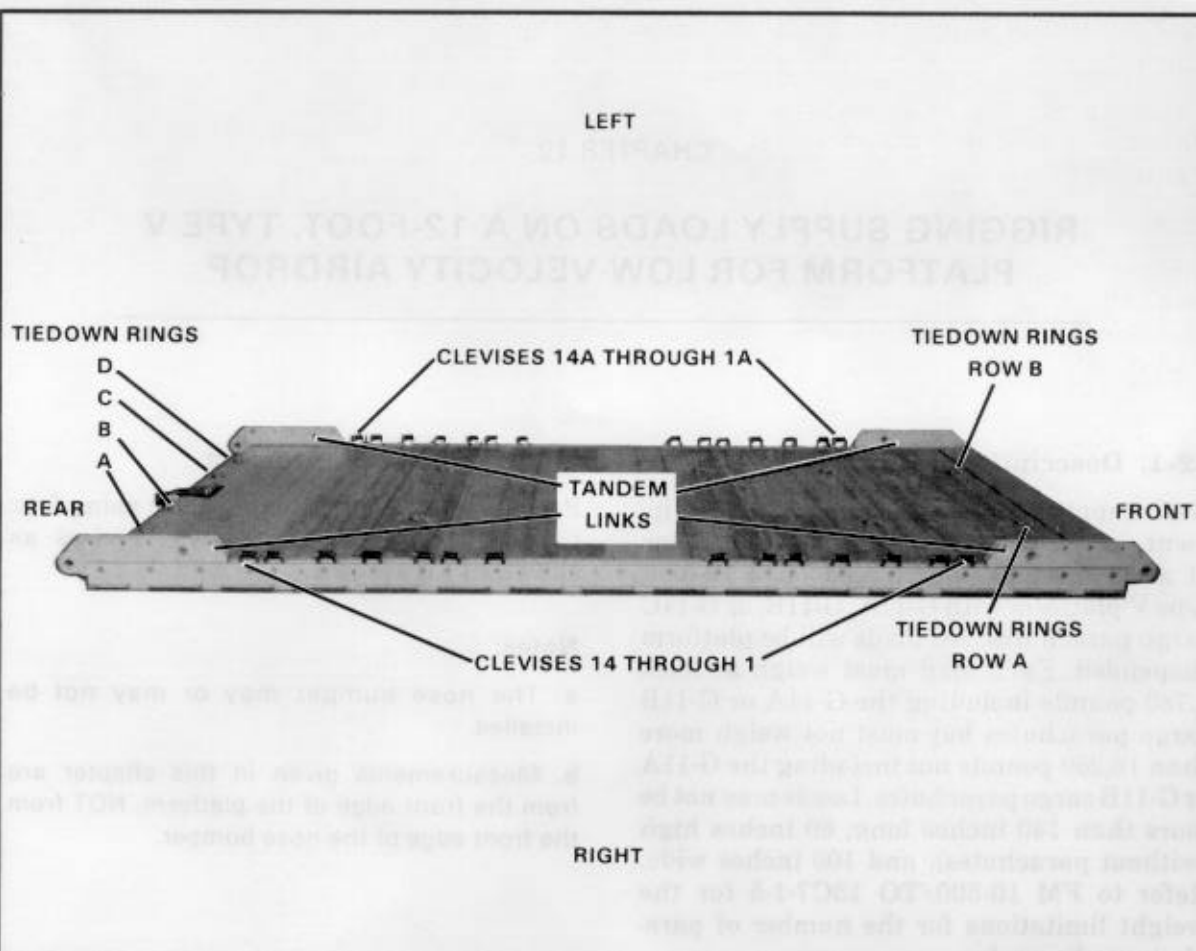
Bulk supplies consisting of rations, equipment, gasoline, ammunition, or other items of general supply are rigged on a 12-foot, type V platform with G-11A, G-11B, or G-11C cargo parachutes. All loads will be platform suspended. Each load must weigh at least 3,780 pounds including the G-11A or G-11B cargo parachutes but must not weigh more than 16,250 pounds not including the G-11A or G-11B cargo parachutes. Loads may not be more than 140 inches long, 60 inches high (without parachutes), and 100 inches wide. Refer to FM 10-500/TO 13C7-1-5 for the weight limitations for the number of parachutes to be used.

12-2. Preparing Platform

Prepare a 12-foot, type V platform using four tandem links and 28 tiedown clevises as shown in Figure 12-1.

Notes:

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



Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/ TO 13C7-52-22.
2. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
3. Install a tandem link on the rear of each platform side rail using holes 22, 23, and 24.
4. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, and 21.
5. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 14.
6. Starting at the front of the platform, number the clevises bolted to the left side from 1A through 14A.
7. Starting at the front of the platform, number the tie-down rings from 1 through 6.
8. Label the rows of tie-down rings on the first five panels A and B from right to left. Label the tie-down rings on the last panel A, B, C, and D from right to left.

Figure 12-1. Platform prepared

12-3. Building and Placing Honeycomb Stacks

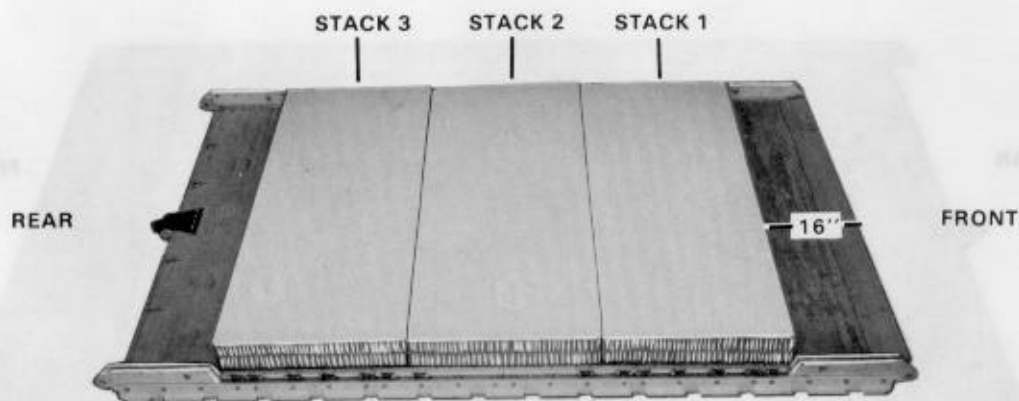
Build three honeycomb stacks and place them on the platform as shown in Figure 12-2.

Note:

When rigging this load for airdrop on a drop zone with a ground elevation of 6,000 to 10,000 feet, add another layer of honeycomb to each stack.

Notes:

- Glue the layers of each honeycomb stack together.
- When ammunition is dropped, two layers of honeycomb are required.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	2	96	36	Honeycomb	Center the stack between the side rails with the 96-inch edge 16 inches from the front edge of the platform.
2	2	96	36	Honeycomb	Center the stack between the side rails with the 96-inch edge 2 inches from stack 1.
3	2	96	36	Honeycomb	Center the stack between the side rails with the 96-inch edge 2 inches from stack 2.

Figure 12-2. Honeycomb stacks prepared and positioned

12-4. Positioning and Securing Load

CAUTION

Only ammunition listed in FM 10-553/TO 13C7-18-41 may be airdropped. Hazardous material must be packaged, marked, and labeled as required by AFR 71-4/TM 38-250.

Position and secure the load as described below.

a. Form six 30-foot tiedown straps. Lay two 30-foot straps across each honeycomb stack as shown in Figure 12-3.

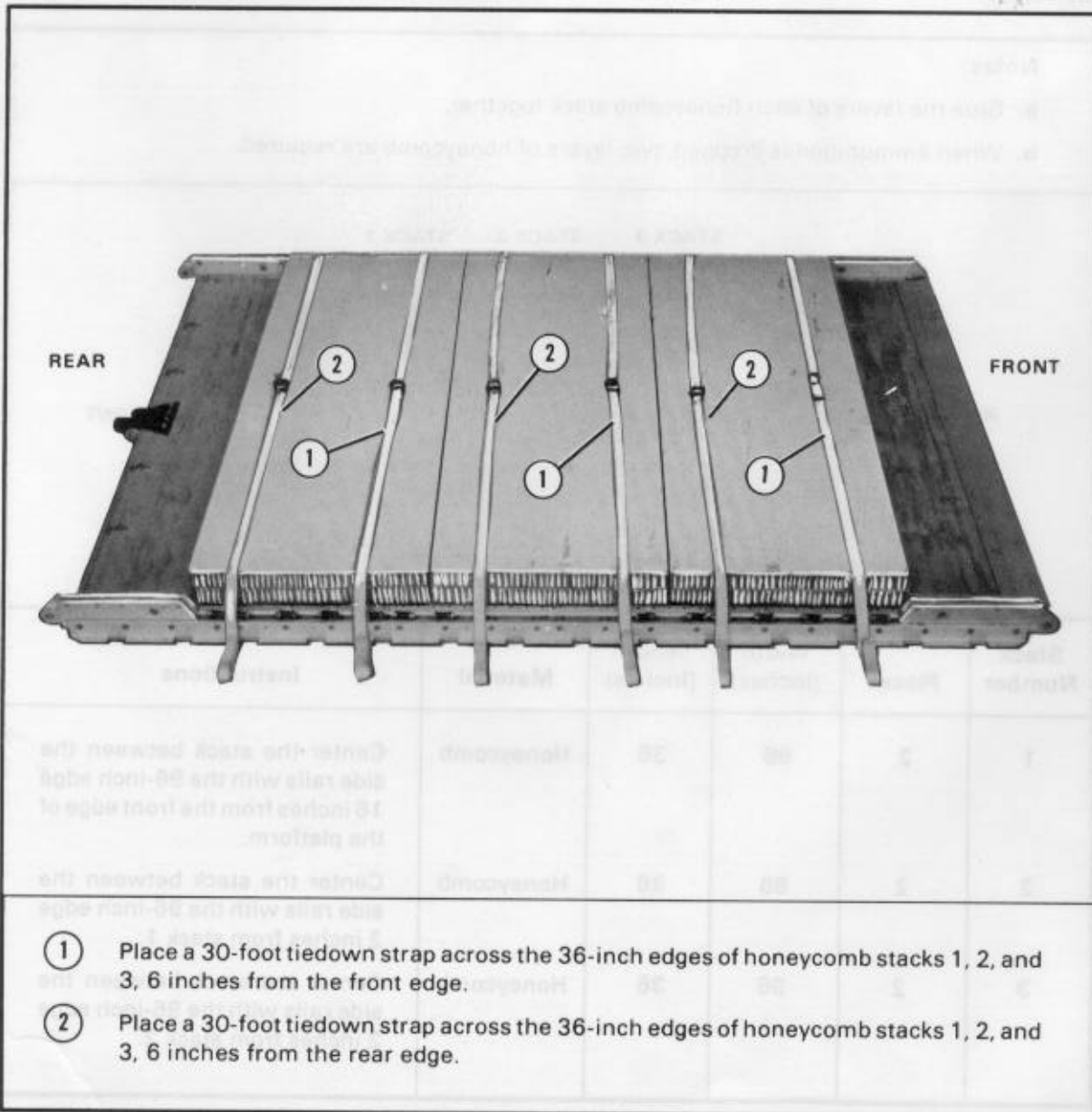
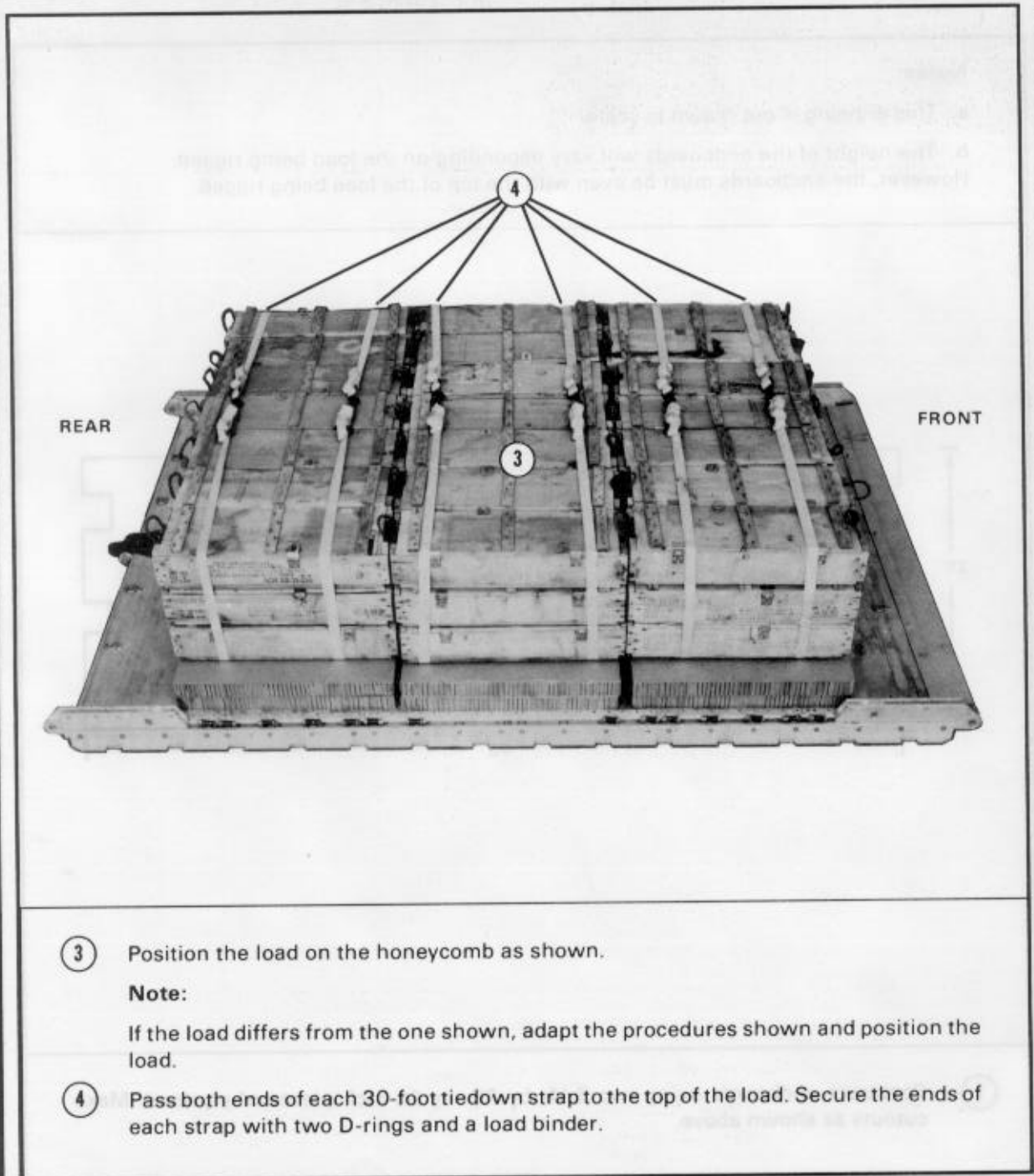


Figure 12-3. Load positioned and secured

b. Position the load on the honeycomb with the weight of the load evenly distributed as shown in Figure 12-3.

c. Secure the load as shown in Figure 12-3.



- ③ Position the load on the honeycomb as shown.

Note:

If the load differs from the one shown, adapt the procedures shown and position the load.

- ④ Pass both ends of each 30-foot tiedown strap to the top of the load. Secure the ends of each strap with two D-rings and a load binder.

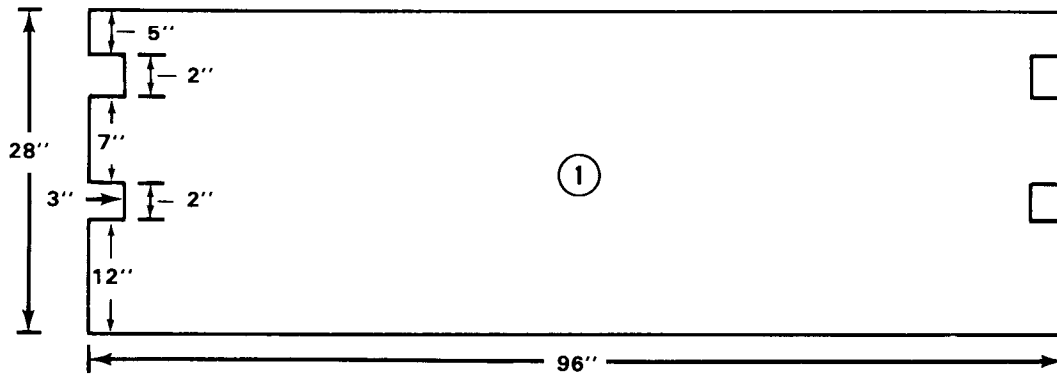
Figure 12-3. Load positioned and secured (continued)

12-5. Constructing and Installing Endboards

Construct the endboards as shown in Figure 12-4. Install the endboards as shown in Figure 12-4.

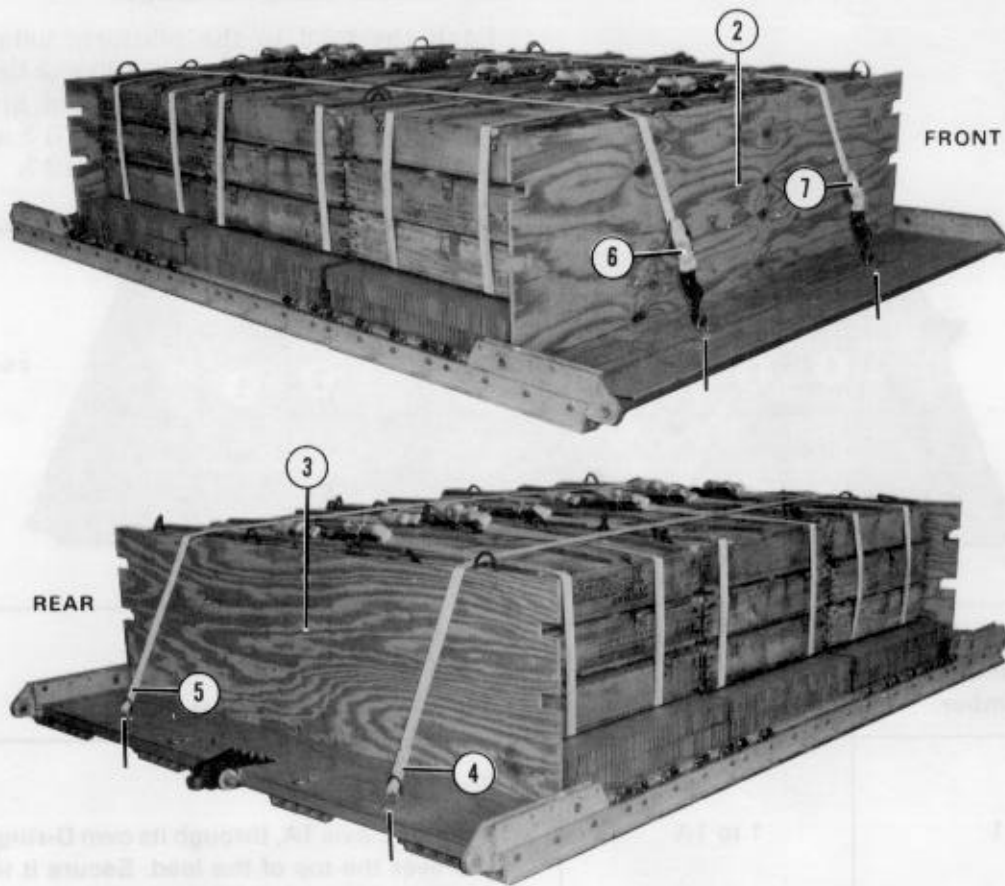
Notes:

- a. This drawing is not drawn to scale.
- b. The height of the endboards will vary depending on the load being rigged. However, the endboards must be even with the top of the load being rigged.



- ① Construct endboards using two 3/4- by 28- by 96-inch pieces of plywood. Make cutouts as shown above.

Figure 12-4. Endboards constructed and installed



- ② Place one endboard against the front of the load.
- ③ Place one endboard against the rear of the load.
- ④ Pass the free end of a 15-foot tiedown strap through tiedown ring A6 and through its own D-ring. Pass the free end of the strap over the top of the load.

Note:

A 30-foot tiedown strap may be required in steps 4 and 5. If so, form the 30-foot tiedown strap according to FM 10-500/TO 13C7-1-5. Secure each end of the strap with a D-ring and a load binder.

- ⑤ Pass the free end of a 15-foot tiedown strap through tiedown ring D6 and through its own D-ring. Pass the free end of the strap over the top of the load.
- ⑥ Secure the end of the tiedown strap positioned in step 4 to tiedown ring A1 with a D-ring and a load binder.
- ⑦ Secure the end of the tiedown strap positioned in step 5 to tiedown ring B1 with a D-ring and a load binder.

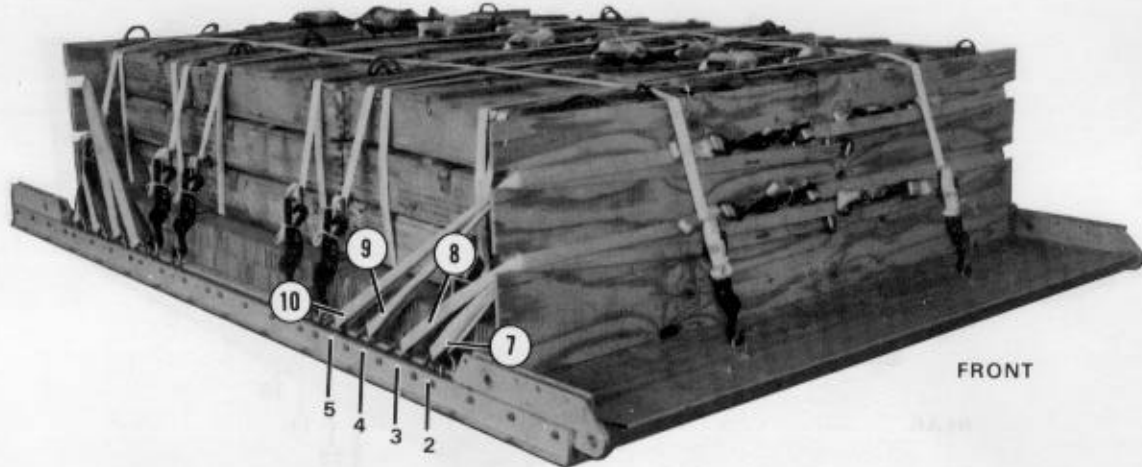
Figure 12-4. Endboards constructed and installed (continued)

12-6. Installing Lashings

Lash the load to the platform using six 15-foot tiedown straps, eight 30-foot tiedown straps, 22 D-rings, and 14 load binders according to FM 10-500/TO 13C7-1-5 and as shown in Figures 12-5, 12-6, and 12-7.

Lashing Number	Tiedown Clevis Number	Instructions
1	1 to 1A	Pass lashing: Through clevis 1A, through its own D-ring, and over the top of the load. Secure it to clevis 1 with a D-ring and a load binder.
2	6 to 6A	Through clevis 6A, through its own D-ring, and over the top of the load. Secure it to clevis 6 with a D-ring and a load binder.
3	7 to 7A	Through clevis 7A, through its own D-ring, and over the top of the load. Secure it to clevis 7 with a D-ring and a load binder.
4	8 to 8A	Through clevis 8A, through its own D-ring, and over the top of the load. Secure it to clevis 8 with a D-ring and a load binder.
5	9 to 9A	Through clevis 9A, through its own D-ring, and over the top of the load. Secure it to clevis 9 with a D-ring and a load binder.
6	14 to 14A	Through clevis 14A, through its own D-ring, and over the top of the load. Secure it to clevis 14 with a D-ring and a load binder.

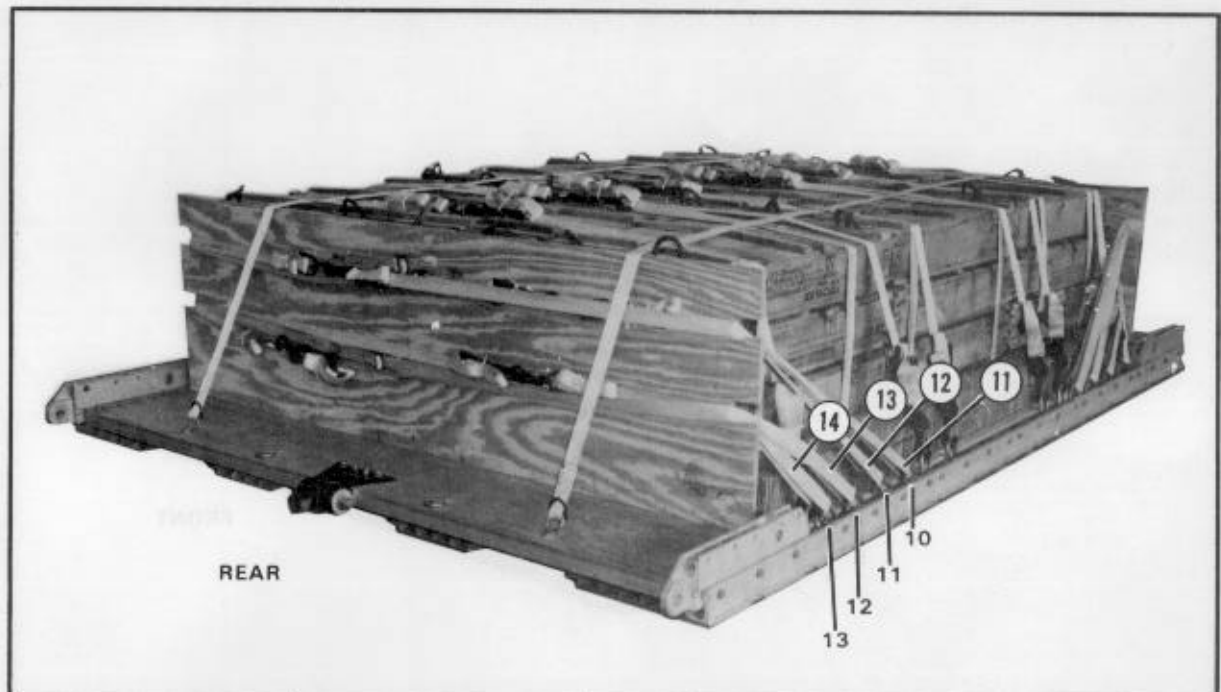
Figure 12-5. Lashings 1 through 6 installed



Lashing Number	Tiedown Clevis Number	Instructions
*7	2 to 2A	Pass lashing: Through clevis 2, around the front endboard (through the lower cutouts), and through clevis 2A.
*8	3 to 3A	Through clevis 3, around the front endboard (through the lower cutouts), and through clevis 3A.
*9	4 to 4A	Through clevis 4, around the front endboard (through the upper cutouts), and through clevis 4A.
*10	5 to 5A	Through clevis 5, around the front endboard (through the upper cutouts), and through clevis 5A.

* Denotes a 30-foot lashing. Form the lashing according to FM 10-500/TO 13C7-1-5. Run lashing as stated above. Fit a D-ring on each free end of the lashing and secure the ends at the front of the load with a load binder.

Figure 12-6. Lashings 7 through 10 installed

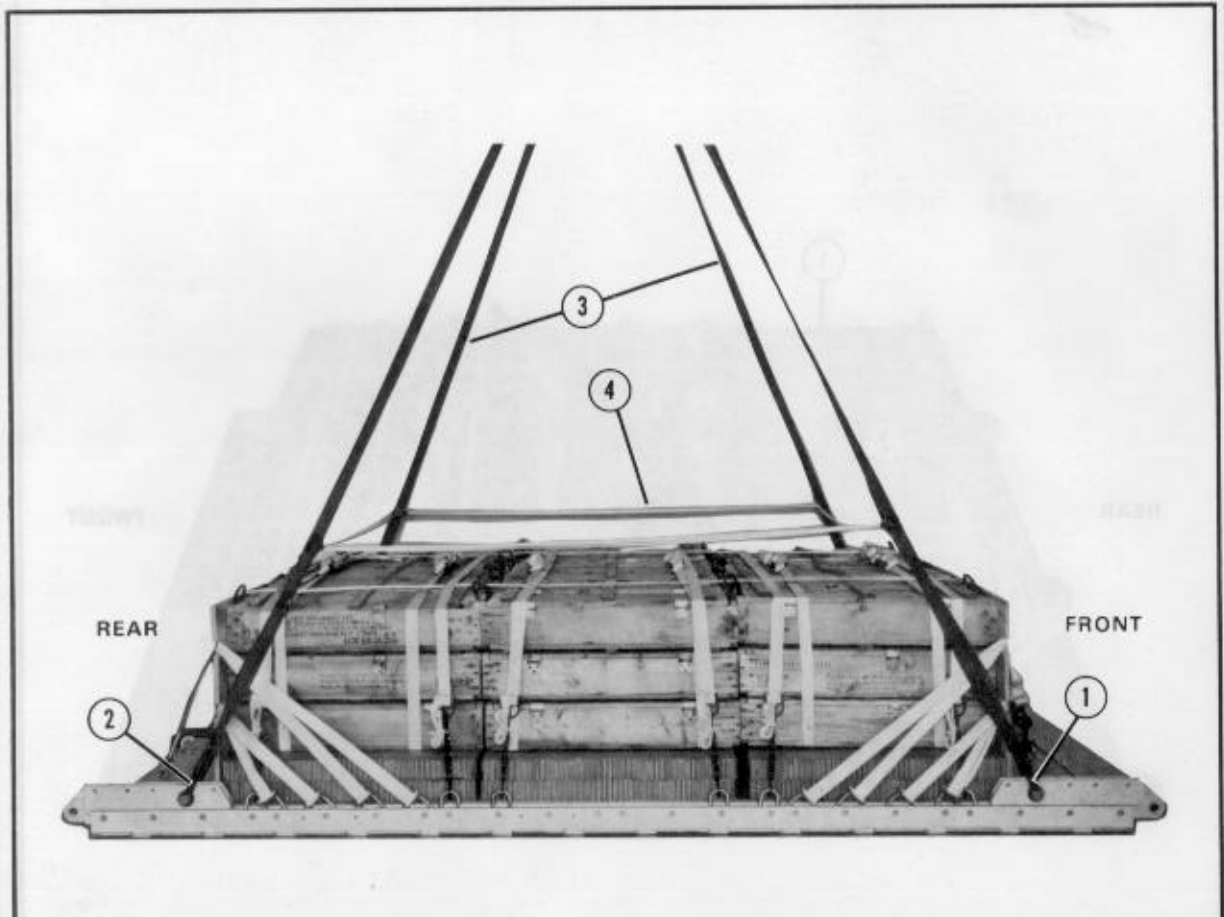


Lashing Number	Tiedown Clevis Number	Instructions
*11	10 to 10A	Pass lashing: Through clevis 10, around the rear endboard (through the upper cutouts), and through clevis 10A.
*12	11 to 11A	Through clevis 11, around the rear endboard (through the upper cutouts), and through clevis 11A.
*13	12 to 12A	Through clevis 12, around the rear endboard (through the lower cutouts), and through clevis 12A.
*14	13 to 13A	Through clevis 13, around the rear endboard (through the lower cutouts), and through clevis 13A.
<p>* Denotes a 30-foot lashing. Form the lashing according to FM 10-500/TO 13C7-1-5. Run lashing as stated above. Fit a D-ring on each free end of the lashing and secure the ends at the front of the load with a load binder.</p>		

Figure 12-7. Lashings 11 through 14 installed

12-7. Installing Suspension Slings and Deadman's Tie

Install the suspension slings as shown in Figure 12-8 using four 12-foot (3-loop), type X or four 12-foot (2-loop), type XXVI nylon webbing slings and four large suspension clevis assemblies. Install the deadman's tie as shown in Figure 12-8.

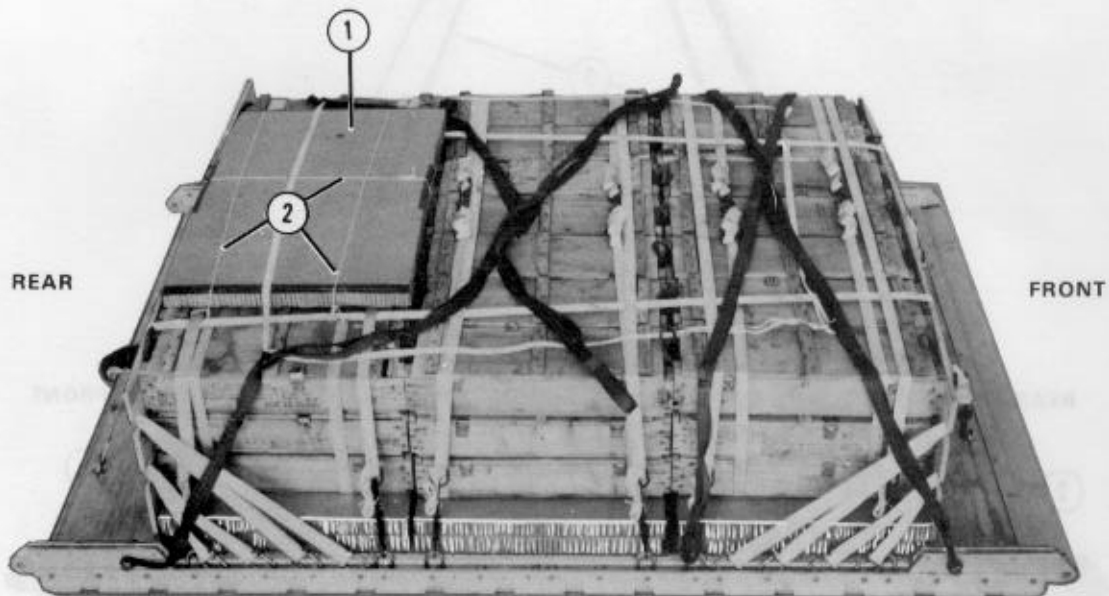


- ① Pass one end of a 12-foot suspension sling through the bell portion of a large suspension clevis. Bolt the clevis to the suspension holes of the right front tandem link.
- ② Attach a suspension sling to the right rear tandem link as described in 1.
- ③ Attach a suspension sling to each tandem link on the left rail as described above.
- ④ Make the deadman's tie according to FM 10-500/TO 13C7-1-5.

Figure 12-8. Suspension slings and deadman's tie installed

12-8. Installing Parachute Stowage Platform

Install the parachute stowage platform as shown in Figure 12-9.

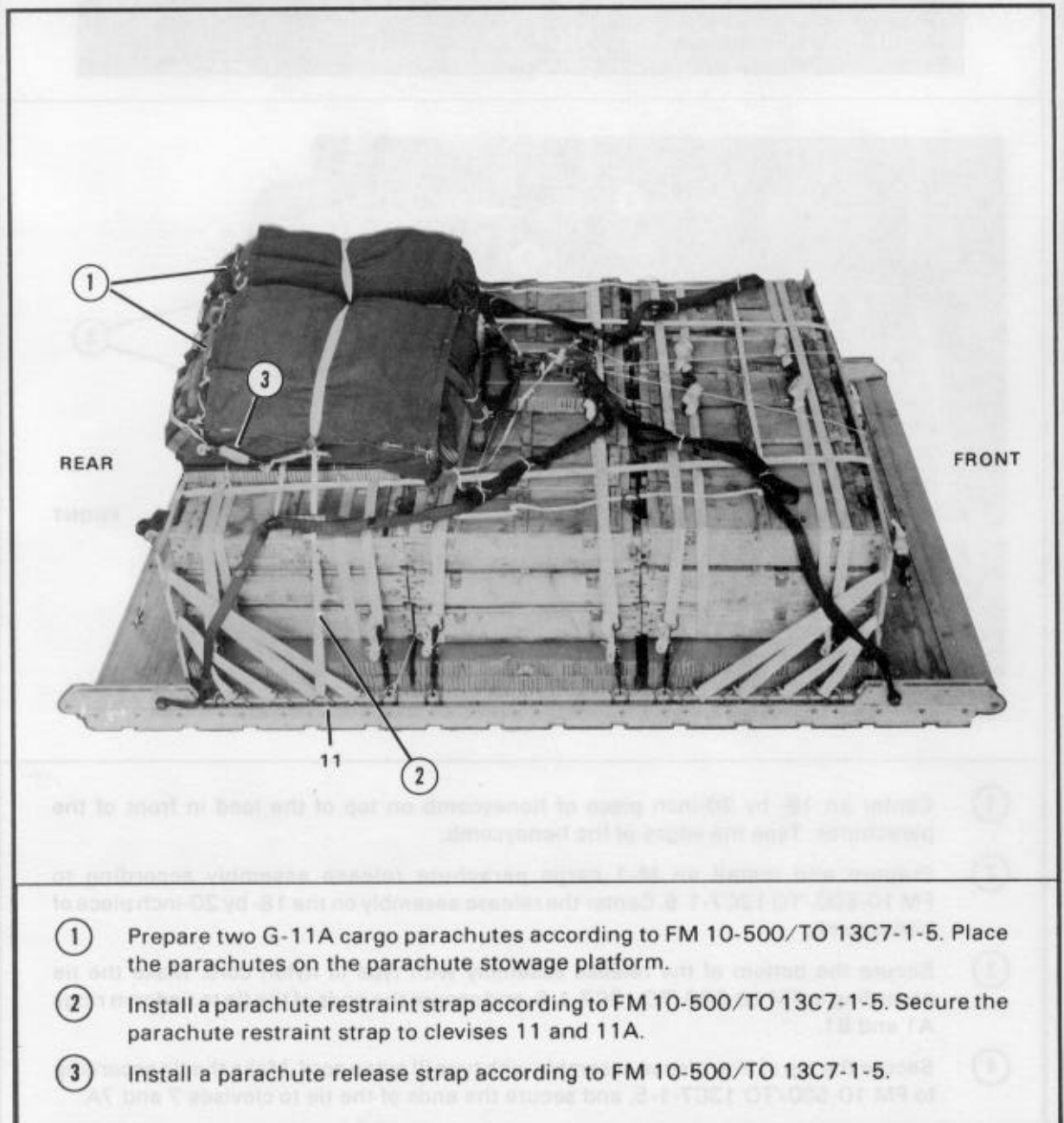


- ① Center a 36- by 60-inch piece of honeycomb on the rear of the load with one 60-inch edge of the honeycomb even with the rear endboard. Tape the edges of the honeycomb.
- ② Secure the honeycomb in place with three lengths of type III nylon cord.

Figure 12-9. Parachute stowage platform installed

12-9. Installing Parachutes

Compute parachute requirements for the load being rigged. Select the correct number of G-11A, G-11B, or G-11C cargo parachutes. The load in Figure 12-10 shows two G-11A cargo parachutes. Install the parachutes as shown in Figure 12-10.



- ① Prepare two G-11A cargo parachutes according to FM 10-500/TO 13C7-1-5. Place the parachutes on the parachute stowage platform.
- ② Install a parachute restraint strap according to FM 10-500/TO 13C7-1-5. Secure the parachute restraint strap to clevises 11 and 11A.
- ③ Install a parachute release strap according to FM 10-500/TO 13C7-1-5.

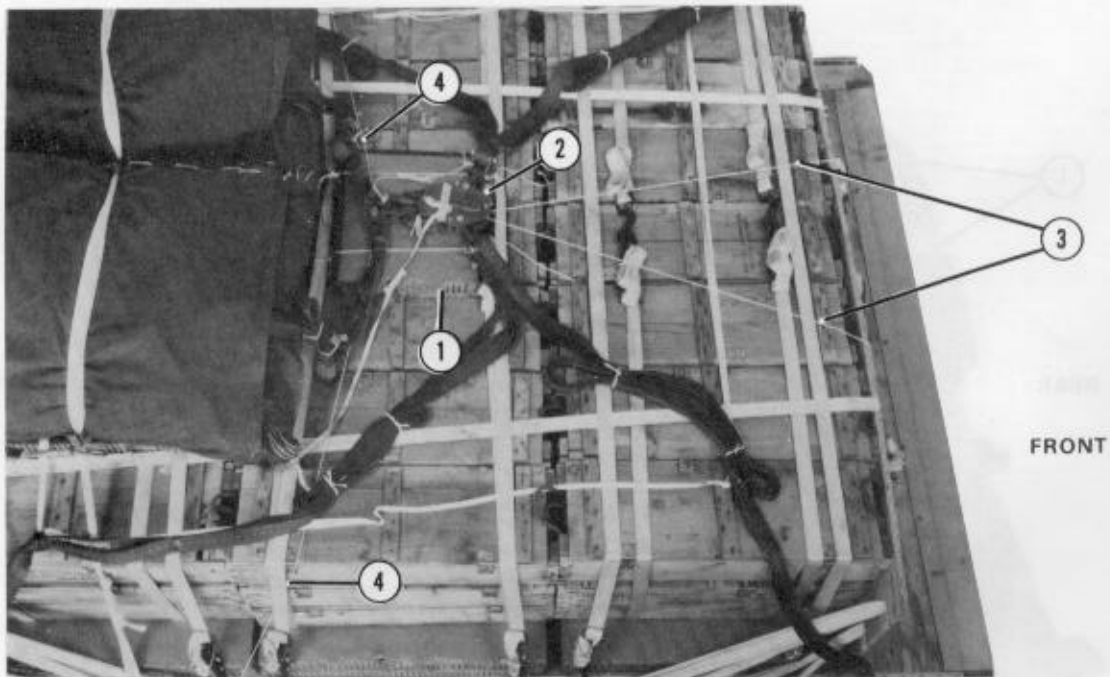
Figure 12-10. Parachutes installed

12-10. Installing Release System

Install and safety an M-1 cargo parachute release assembly as shown in Figure 12-11.

CAUTION

When three or more G-11B or G-11C cargo parachutes are used, an M-2 cargo parachute release assembly is required.

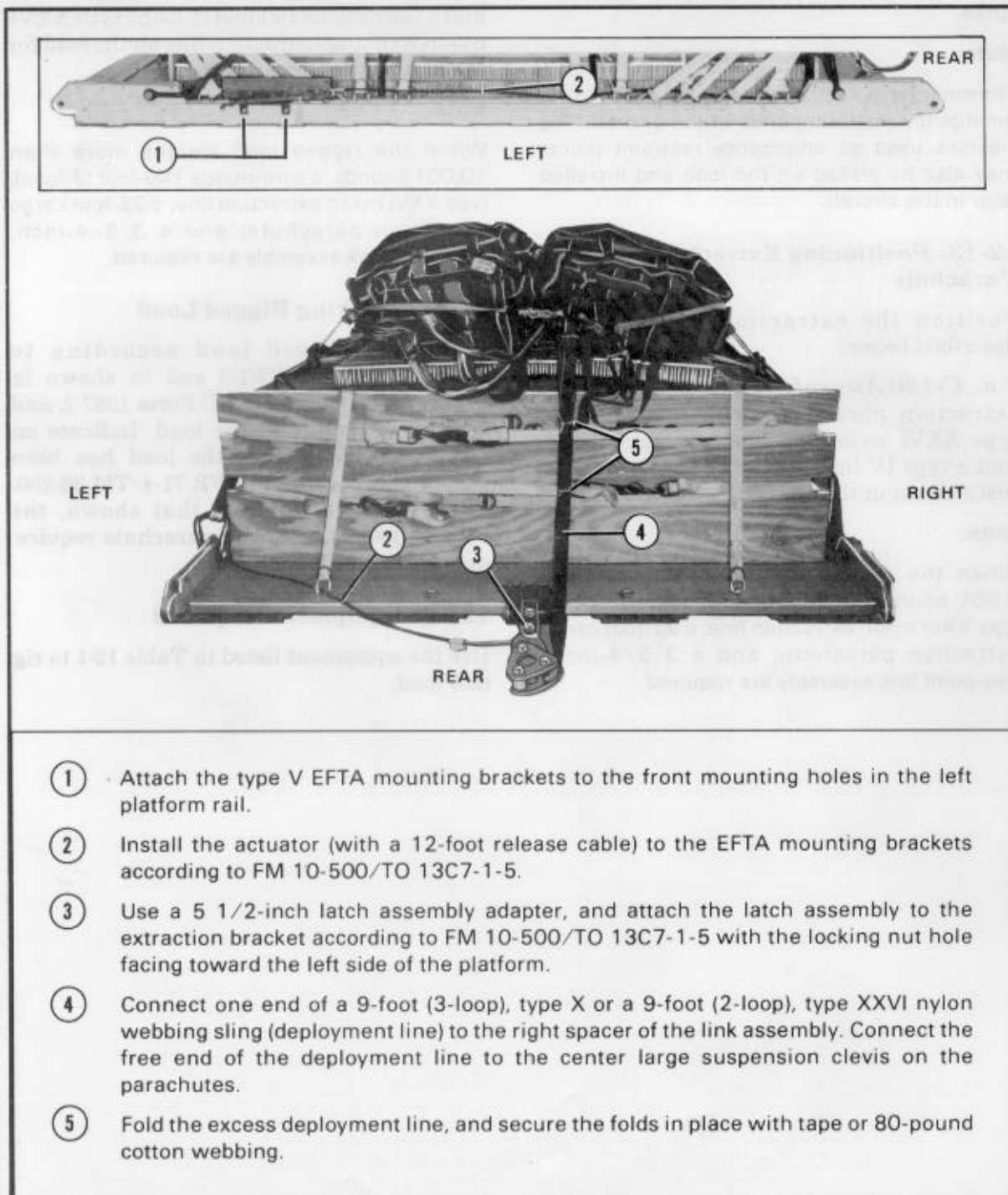


- ① Center an 18- by 20-inch piece of honeycomb on top of the load in front of the parachutes. Tape the edges of the honeycomb.
- ② Prepare and install an M-1 cargo parachute release assembly according to FM 10-500/TO 13C7-1-5. Center the release assembly on the 18- by 20-inch piece of honeycomb.
- ③ Secure the bottom of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to tiedown rings A1 and B1.
- ④ Secure the top of the release assembly with type III nylon cord. Make the tie according to FM 10-500/TO 13C7-1-5, and secure the ends of the tie to clevises 7 and 7A.

Figure 12-11. Release assembly installed

12-11. Installing Extraction System

Install the EFTC extraction system as shown in Figure 12-12.



- ① Attach the type V EFTA mounting brackets to the front mounting holes in the left platform rail.
- ② Install the actuator (with a 12-foot release cable) to the EFTA mounting brackets according to FM 10-500/TO 13C7-1-5.
- ③ Use a 5 1/2-inch latch assembly adapter, and attach the latch assembly to the extraction bracket according to FM 10-500/TO 13C7-1-5 with the locking nut hole facing toward the left side of the platform.
- ④ Connect one end of a 9-foot (3-loop), type X or a 9-foot (2-loop), type XXVI nylon webbing sling (deployment line) to the right spacer of the link assembly. Connect the free end of the deployment line to the center large suspension clevis on the parachutes.
- ⑤ Fold the excess deployment line, and secure the folds in place with tape or 80-pound cotton webbing.

Figure 12-12. Extraction system installed

12-12. Installing Provisions for Emergency Restraints

Attach a medium (3/4-inch) suspension clevis to the front hole on the front tandem links.

Note:

The emergency restraints will be installed to the emergency restraint points in the aircraft. The clevises used as emergency restraint points may also be placed on the load and installed later in the aircraft.

12-13. Positioning Extraction Parachute

Position the extraction parachute as described below.

a. C-130 Aircraft. Place a 15-foot cargo extraction parachute; a 60-foot (1-loop), type XXVI nylon webbing extraction line; and a type IV link assembly on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 8,001 pounds, a 60-foot (3-loop), type X or type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

b. C-141 Aircraft. Place a 15-foot cargo extraction parachute with an adapter web and a continuous 160-foot (1-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 10,001 pounds, a continuous 140-foot (3-loop), type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

12-14. Marking Rigged Load

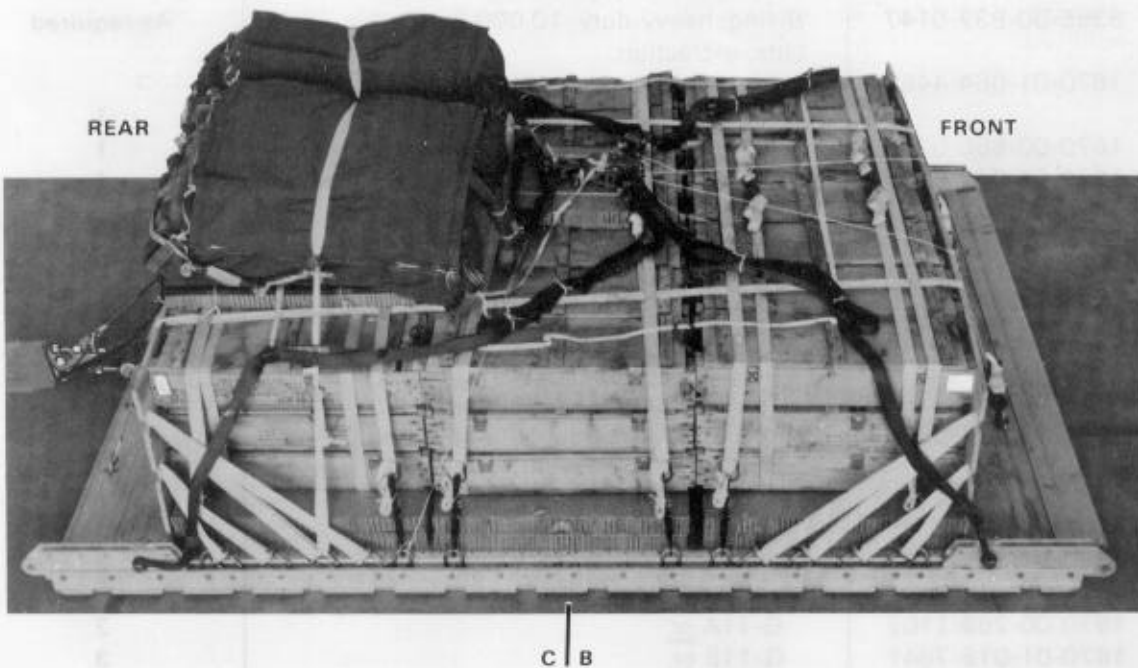
Mark the rigged load according to FM 10-500/TO 13C7-1-5 and as shown in Figure 12-13. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

12-15. Equipment Required

Use the equipment listed in Table 12-1 to rig this load.

CAUTION

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



RIGGED LOAD DATA

Weight:	Load shown	8,904 pounds
	Maximum allowable	16,250 pounds
Height		56 inches
Width		208 inches
Length		152 inches
Overhang:	Front	4 1/2 inches
	Rear	18 inches
CB (from front edge of platform)		74 inches
Extraction system (shown)		EFTC

Figure 12-13. Supply loads rigged on a 12-foot type V platform for low-velocity airdrop

Table 12-1. Equipment required for rigging typical supply loads on a 12-foot type V platform for low-velocity airdrop

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)	4
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5783	Coupling, airdrop, extraction force transfer, w 12-foot cable	1
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI nylon webbing (for C-130) <u>or</u>	1
1670-00-856-0266	60-ft (3-loop), type X nylon webbing <u>or</u>	1
1670-01-062-6313	60-ft (3-loop), type XXVI nylon webbing	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141) <u>or</u>	1
1670-01-107-7652	160-ft (1-loop), type XXVI nylon webbing	1
	Link assembly:	
1670-00-003-1953	Two-point, plate side, 3 3/4-inch (for extraction line)	2
1670-00-783-5988	Type IV (for extraction line)	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	7 sheets
	18- by 20-in	(1)
	36- by 96-in	(6)
1670-01-183-2678	Leaf, extraction line (line bag)	2
	Parachute, cargo:	
1670-00-269-1107	G-11A <u>or</u>	2
1670-01-016-7841	G-11B <u>or</u>	3
1670-01-016-7841	G-11C	3
	Parachute, cargo extraction:	
1670-00-052-1548	15-ft <u>or</u>	1
1670-01-063-3715	15-ft (new)	1
1670-00-687-5458	22-ft <u>or</u>	1
1670-01-063-3716	22-ft (new)	1
	Platform, AD, type V, 12-ft:	
	Bracket:	
1670-01-162-2375	Inside EFTA	1
1670-01-162-2374	Outside EFTA	1
1670-01-162-2385	Bumper, nose	1
1670-01-162-2372	Clevis, load tiedown	28
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-in	2 sheets

Table 12-1. Equipment required for rigging typical supply loads on a 12-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
1670-01-097-8816	Release, cargo parachute: M-1 <u>or</u>	1
1670-01-097-8817	M-2	1
1670-01-062-6304	Sling, cargo, airdrop: 9-ft (2-loop), type XXVI nylon webbing <u>or</u>	1
1670-00-753-3631	9-ft (3-loop), type X nylon webbing (deployment line)	1
1670-00-823-5041	12-ft (3-loop), type X nylon webbing <u>or</u>	4
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3794	20-ft (2-loop), type X nylon webbing (riser extensions) <u>or</u>	2
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	18
8305-00-268-2411	Webbing: Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in, 1,000-lb, natural	As required
8305-00-263-3591	Nylon, type VIII, 3,600-lb	As required

CHAPTER 13

**RIGGING FAST EQUIPMENT ON A 12-FOOT, TYPE V
PLATFORM FOR LOW-VELOCITY AIRDROP**

13-1. Description of Load

The FAST equipment is rigged as a bulk supply load on a 12-foot, type V platform. The load rigged in this chapter requires three G-11A or G-11B cargo parachutes. These procedures may be used to rig other bulk supply loads consisting of rations, equipment, gasoline, ammunition, or other items of general supply. The parachute requirements must be computed for each load. All loads will be platform suspended. Each load must weigh at least 3,780 pounds but must not weigh more than 12,000 pounds not including the G-11A, G-11B, or G-11C cargo parachutes. Loads you are rigging may not be more than 140 inches long, 60 inches high (without parachutes), and 100 inches wide.

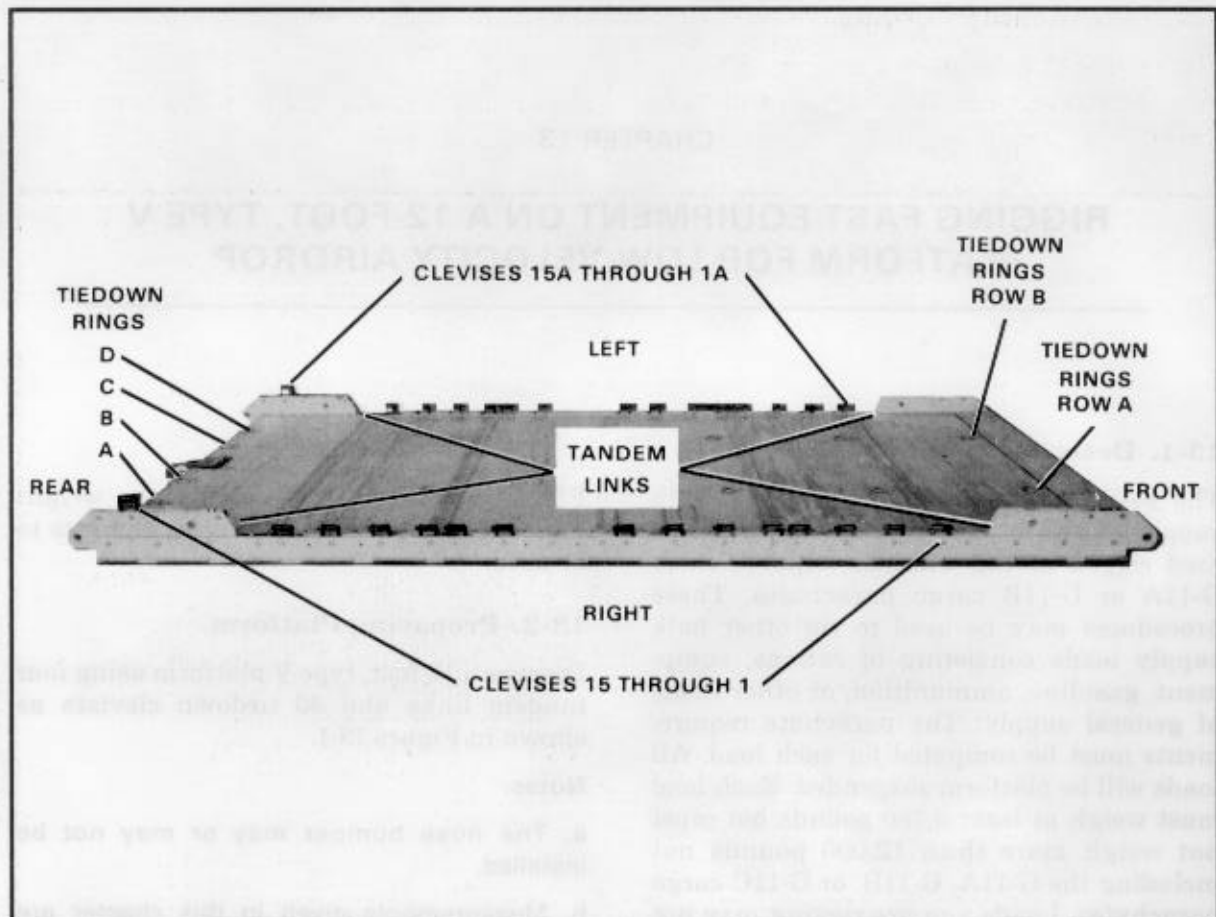
FM 10-500/TO 13C7-1-5 shows the weight limitations for the number of parachutes to be used.

13-2. Preparing Platform

Prepare a 12-foot, type V platform using four tandem links and 30 tiedown clevises as shown in Figure 13-1.

Notes:

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



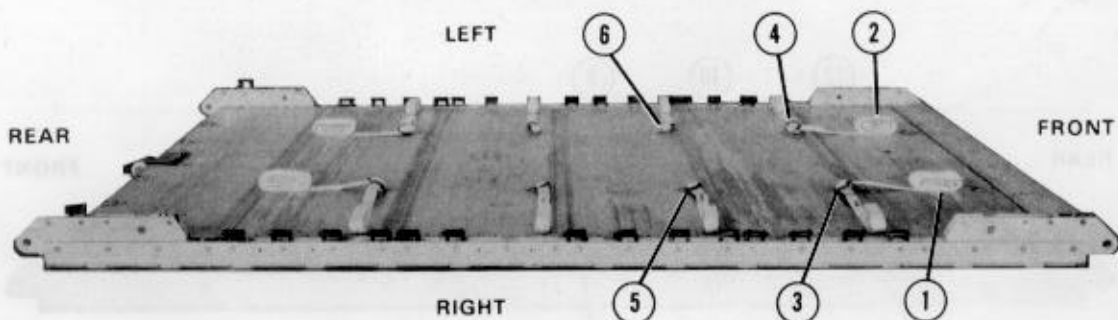
Step:

1. Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.
2. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
3. Install a tandem link on the rear of each platform side rail using holes 21, 22, and 23.
4. Install a clevis to the third bushing of each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 5, 6, 7, 8, 9, 10, 11, 12, 15, 16, 17, 18, 19, and 20.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 15.
7. Starting at the front of the platform, number the clevises bolted to the left side from 1A through 15A.
8. Starting at the front of the platform, number the tiedown rings from 1 through 6.
9. Label the rows of tiedown rings on the first five panels A and B from right to left. Label the tiedown rings on the last panel A, B, C, and D from right to left.

Figure 13-1. Platform prepared

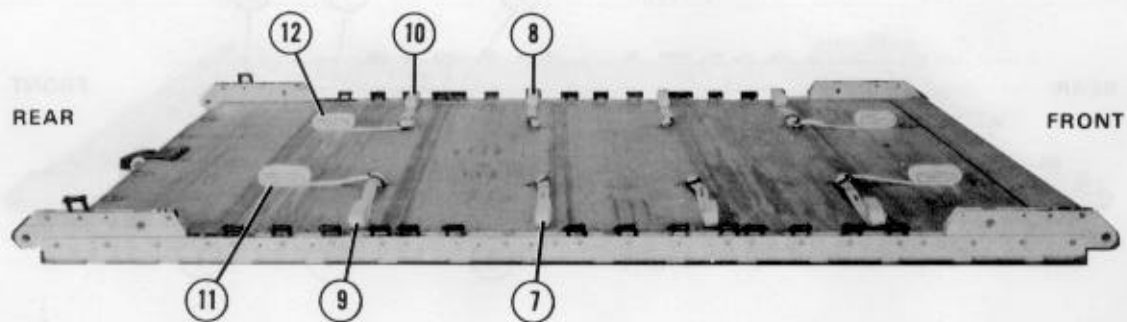
13-3. Positioning Lashings

Use twelve 15-foot tiedown straps, and position the straps on the platform as shown in Figure 13-2.



- ① Pass the free end of a 15-foot tiedown strap through tiedown ring A2 and through its own D-ring. Pull the free end of the strap toward the front of the platform.
- ② Pass the free end of a 15-foot tiedown strap through tiedown ring B2 and through its own D-ring. Pull the free end of the strap toward the front of the platform.
- ③ Pass the free end of a 15-foot tiedown strap through tiedown ring A2 and through its own D-ring. Pull the free end of the strap toward the right side of the platform.
- ④ Pass the free end of a 15-foot tiedown strap through tiedown ring B2 and through its own D-ring. Pull the free end of the strap toward the left side of the platform.
- ⑤ Pass the free end of a 15-foot tiedown strap through tiedown ring A3 and through its own D-ring. Pull the free end of the strap toward the right side of the platform.
- ⑥ Pass the free end of a 15-foot tiedown strap through tiedown ring B3 and through its own D-ring. Pull the free end of the strap toward the left side of the platform.

Figure 13-2. Lashings positioned



- ⑦ Pass the free end of a 15-foot tiedown strap through tiedown ring A4 and through its own D-ring. Pull the free end of the strap toward the right side of the platform.
- ⑧ Pass the free end of a 15-foot tiedown strap through tiedown ring B4 and through its own D-ring. Pull the free end of the strap toward the left side of the platform.
- ⑨ Pass the free end of a 15-foot tiedown strap through tiedown ring A5 and through its own D-ring. Pull the free end of the strap toward the right side of the platform.
- ⑩ Pass the free end of a 15-foot tiedown strap through tiedown ring B5 and through its own D-ring. Pull the free end of the strap toward the left side of the platform.
- ⑪ Pass the free end of a 15-foot tiedown strap through tiedown ring A5 and through its own D-ring. Pull the free end of the strap toward the rear of the platform.
- ⑫ Pass the free end of a 15-foot tiedown strap through tiedown ring B5 and through its own D-ring. Pull the free end of the strap toward the rear of the platform.

Figure 13-2. Lashings positioned (continued)

13-4. Constructing and Forming Storage Box Components

Construct the individual components of a storage box as shown in Figures 13-3 through 13-5. Assemble the individual components of the front and rear of the box and the sides of the box as shown in Figure 13-6 for later assembly on the platform.

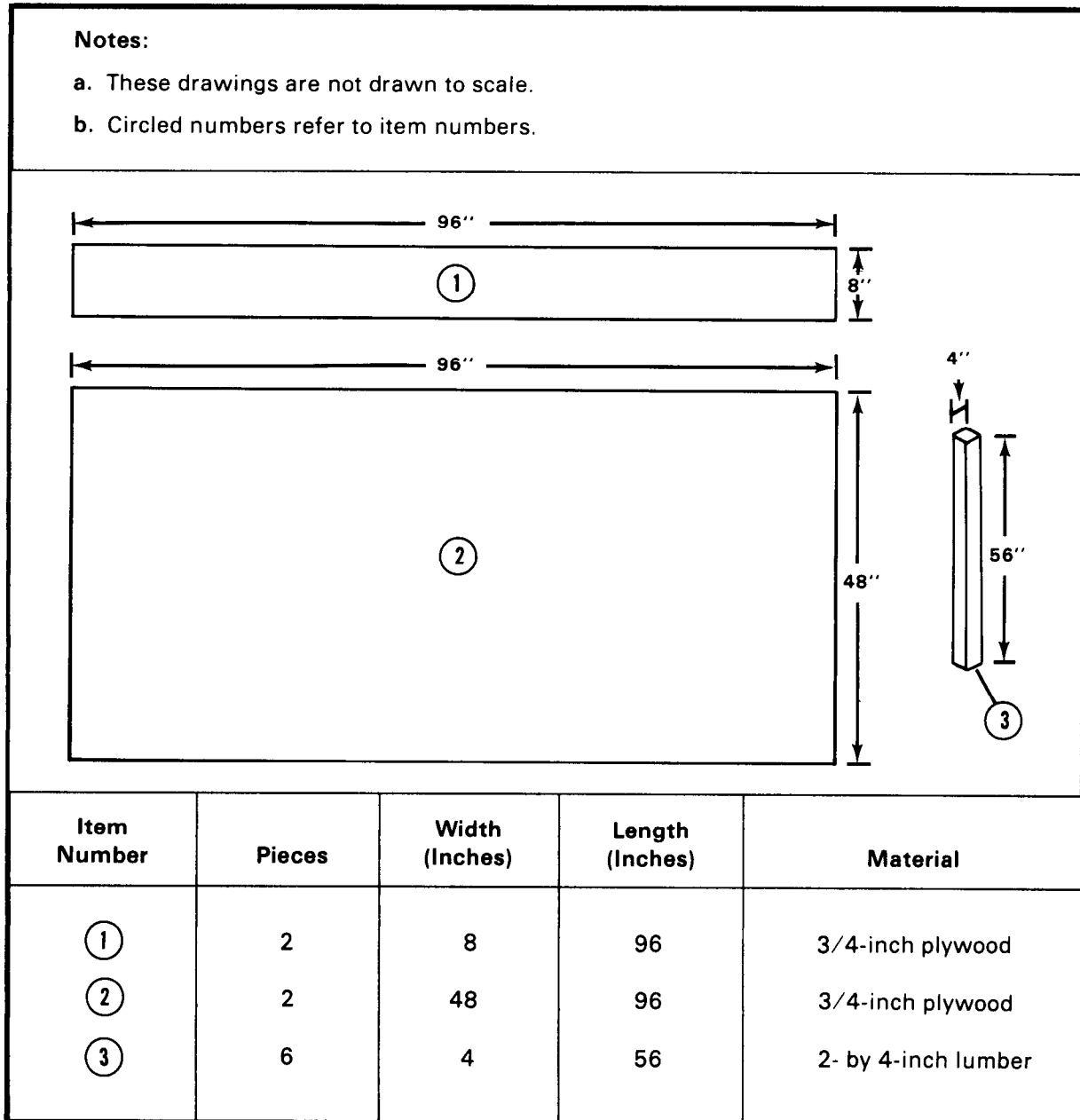
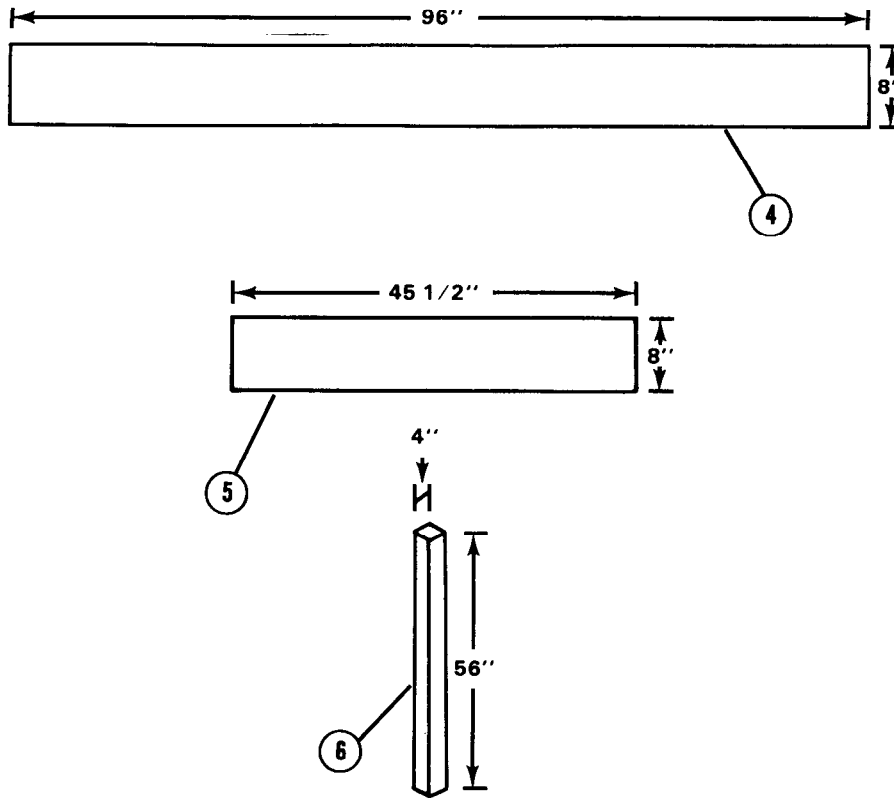


Figure 13-3. Front and rear components of storage box constructed

Notes:

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

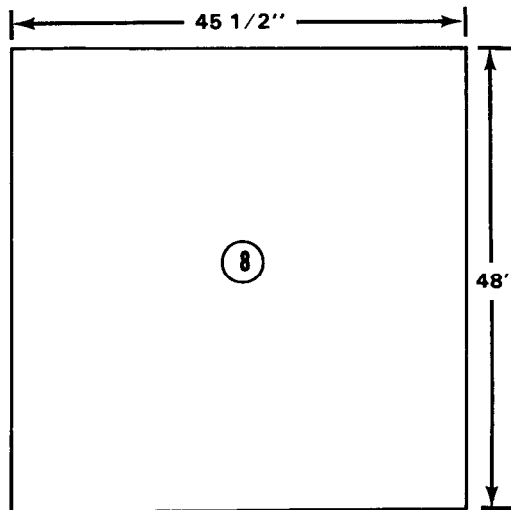
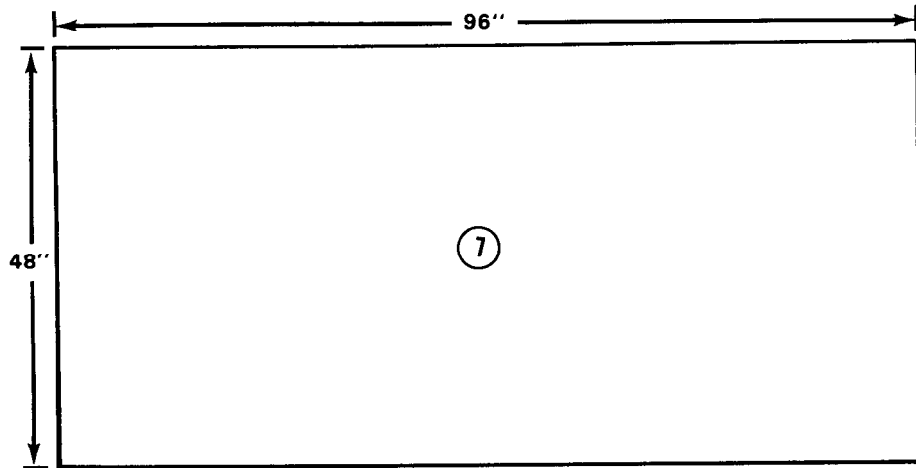


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
④	2	8	96	3/4-inch plywood
⑤	2	8	45 1/2	3/4-inch plywood
⑥	8	4	56	2- by 4-inch lumber

Figure 13-4. Side components of storage box constructed

Notes:

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

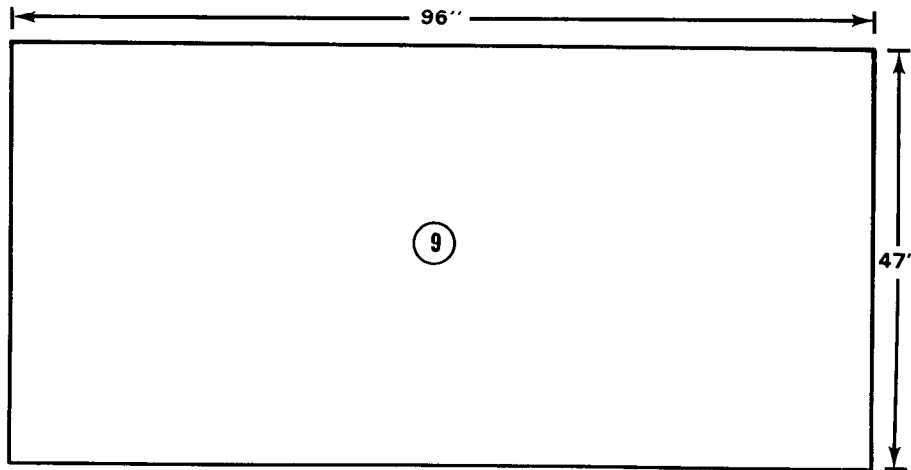


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
⑦	2	48	96	3/4-inch plywood
⑧	2	48	45 1/2	3/4-inch plywood

Figure 13-4. Side components of storage box constructed (continued)

Notes:

- a. This drawing is not drawn to scale.
- b. Circled numbers refer to item numbers.

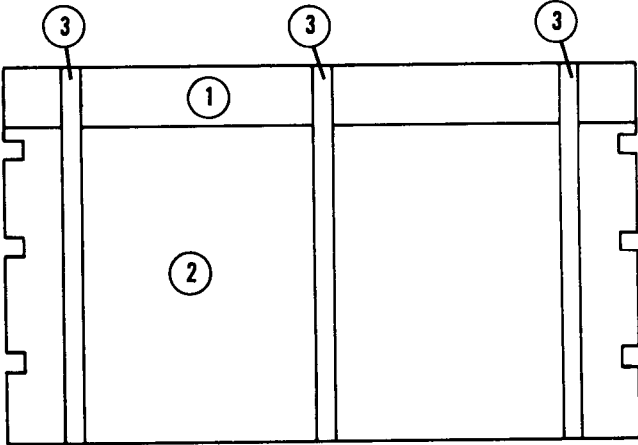


Item Number	Pieces	Width (Inches)	Length (Inches)	Material
⑨	3	47	96	3/4-inch plywood

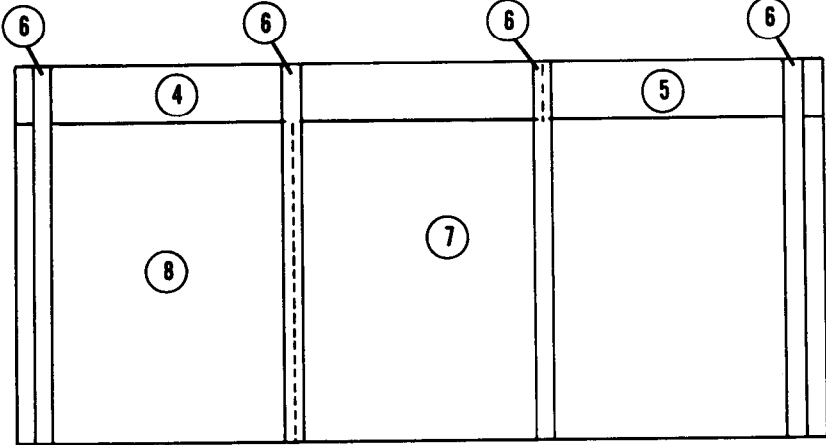
Figure 13-5. Top components of storage box constructed

Notes:

- a. These drawings are not drawn to scale.
- b. Make three evenly spaced 2-inch cutouts on each 48-inch side of the plywood used for the front and rear components before assembling the box.



FRONT AND REAR OF STORAGE BOX



SIDES OF STORAGE BOX

Step:

- 1. Nail the components of the storage box together with sixteen-penny nails to form the sides, front, and rear.
- 2. Bend the ends of the nails to hold the components in place securely.

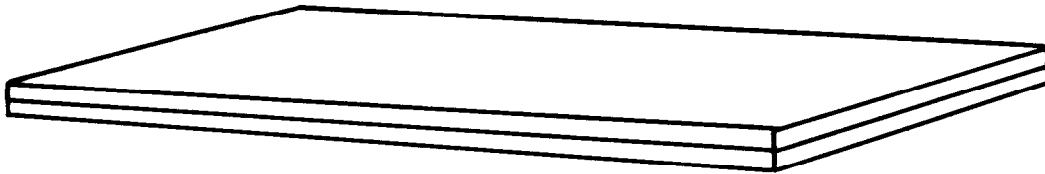
Figure 13-6. Front, rear, and sides of storage box constructed

13-5. Preparing Honeycomb Stacks

Prepare the honeycomb stacks as shown in Figure 13-7.

Note:

This drawing is not drawn to scale.

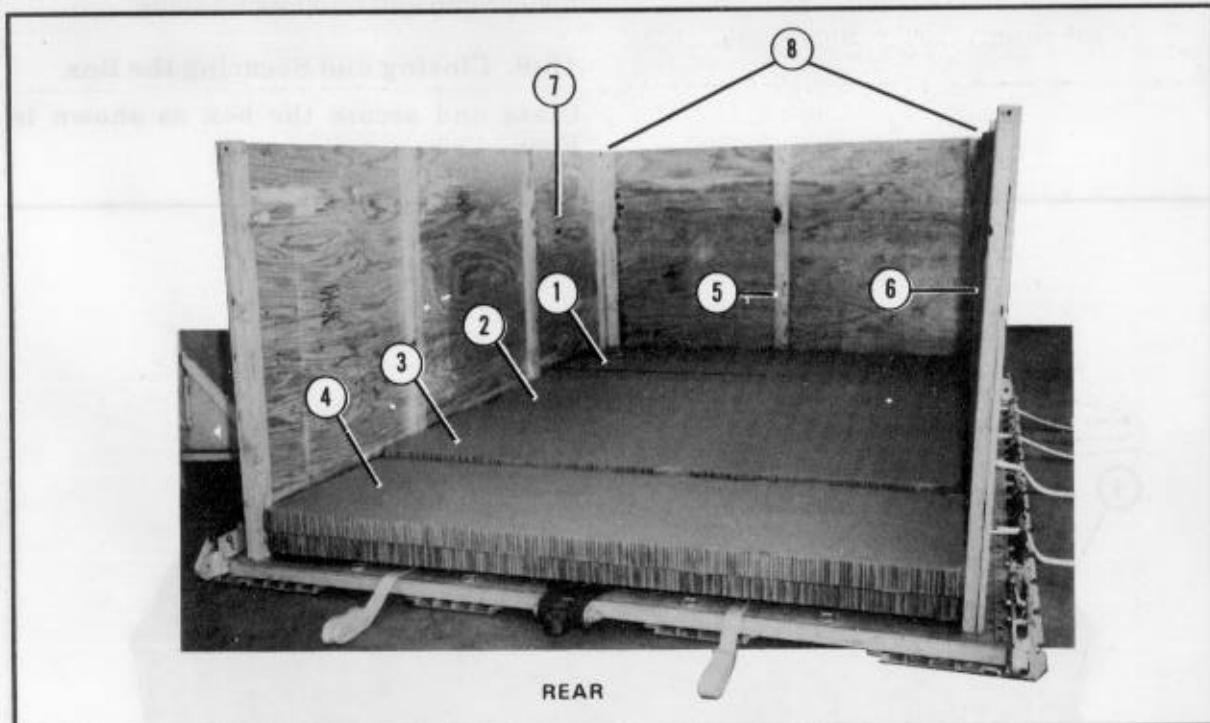


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	2	96	36	Honeycomb	Place one piece on top of the other.
2	2	96	36	Honeycomb	Same as stack 1.
3	2	96	36	Honeycomb	Same as stack 1.
4	2	96	36	Honeycomb	Same as stack 1.

Figure 13-7. Honeycomb stacks prepared

13-6. Positioning Honeycomb Stacks and Assembling Sides of Storage Box

Position and assemble the front and sides of the storage box on the platform as shown in Figure 13-8.



- ① Center stack 1 on the platform with the 96-inch edge of the honeycomb 1 1/2 inches from the front edge of the platform.
- ② Center stack 2 on the platform with one 96-inch edge of the honeycomb against stack 1.
- ③ Center stack 3 on the platform with one 96-inch edge of the honeycomb against stack 2.
- ④ Center stack 4 on the platform with one 96-inch edge of the honeycomb against stack 3.
- ⑤ Center the front of the storage box on the platform against the front of stack 1.
- ⑥ Place the right side of the storage box on the platform even with the honeycomb stacks and the front of the storage box.
- ⑦ Place the left side of the storage box on the platform even with the honeycomb stacks and the front of the storage box.
- ⑧ Nail the sides of the storage box to the front of the storage box with sixteen-penny nails.

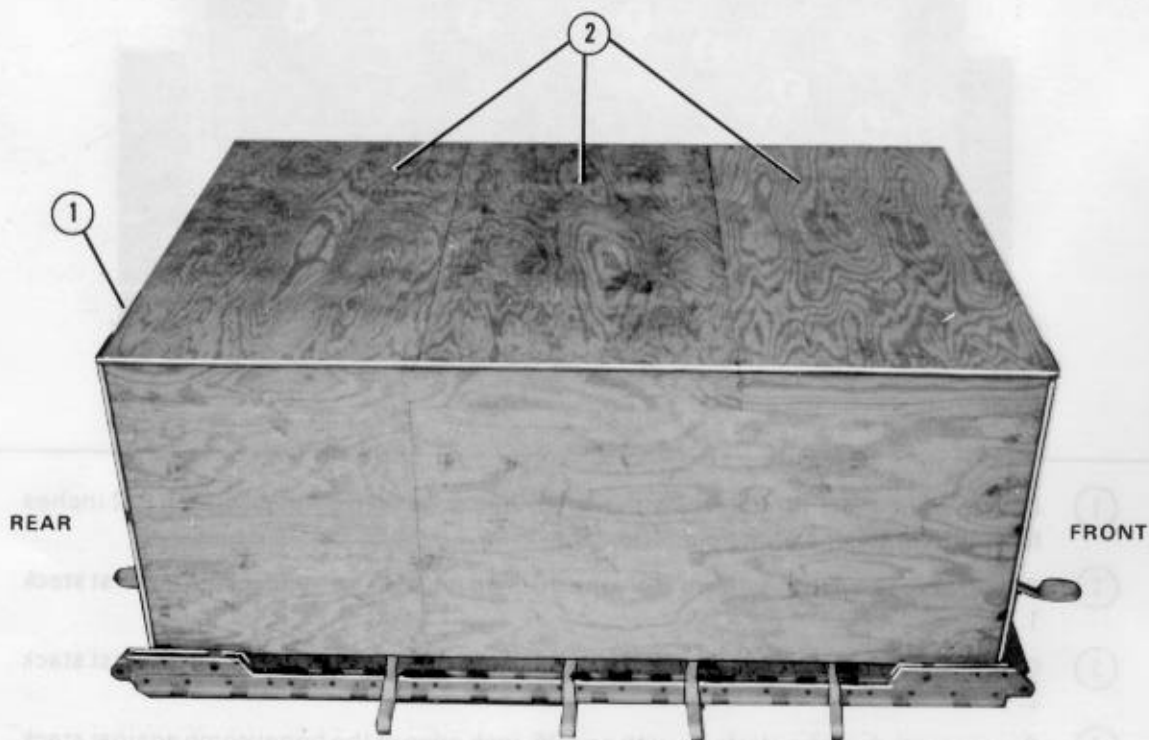
Figure 13-8. Honeycomb stacks positioned and front and sides of the storage box assembled

13-7. Positioning Drop Items

Position the drop items in the storage box on the honeycomb stacks. Distribute the weight of the drop items evenly on the honeycomb stacks. Pad the drop items as necessary, with honeycomb and cellulose wadding.

13-8. Closing and Securing the Box

Close and secure the box as shown in Figure 13-9.



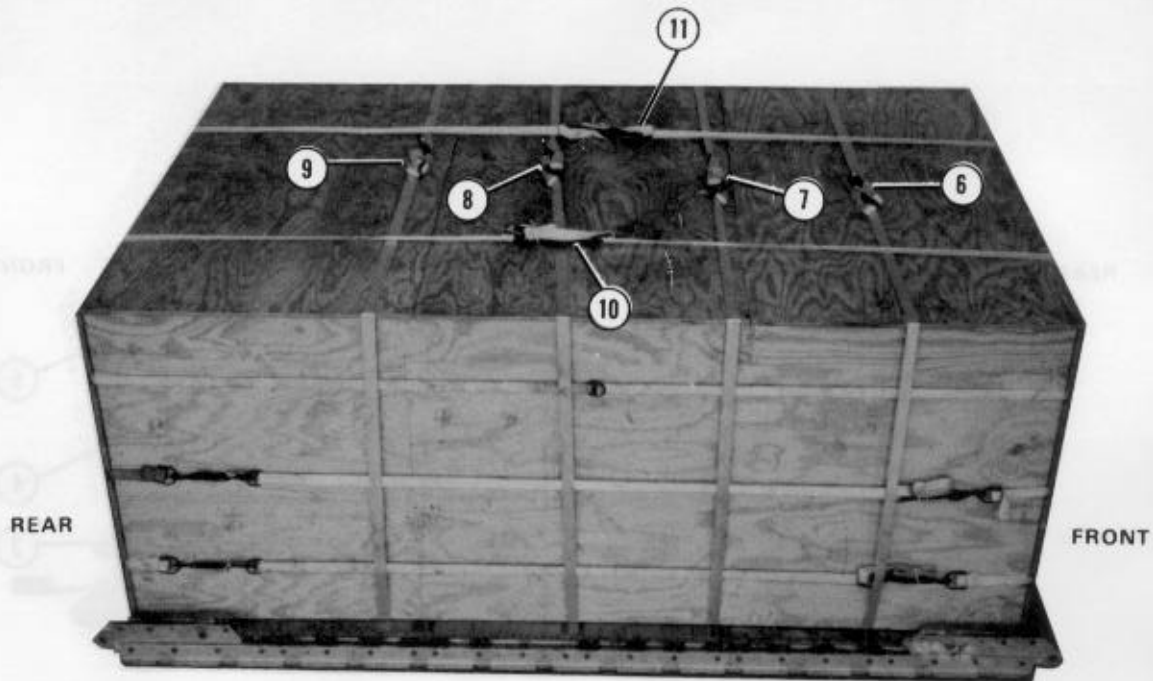
- ① Center the rear of the storage box on the platform against the rear of stack 4. Nail the sides of the box to the rear of the box with sixteen-penny nails.
- ② Place three 3/4- by 47- by 96-inch pieces of plywood side by side on top of the box. Nail each 47- by 96-inch piece of plywood to the sides of the box.

Figure 13-9. Box closed and secured



- ③ Form a 30-foot tiedown strap according to FM 10-500/TO 13C7-1-5. Fit a D-ring on each end of the strap. Pass the strap around the load and through the bottom cutouts. Fit a D-ring on the free end of a 15-foot tiedown strap. Place the 15-foot strap against the storage box between the ends of the 30-foot strap. Hook each end of the 15-foot tiedown strap to the 30-foot tiedown strap with a load binder.
- ④ Install a 30-foot tiedown strap and a 15-foot tiedown strap around the load and through the center cutouts as in step 3.
- ⑤ Install a 30-foot tiedown strap and a 15-foot tiedown strap around the load and through the top cutouts as in step 3.

Figure 13-9. Box closed and secured (continued)

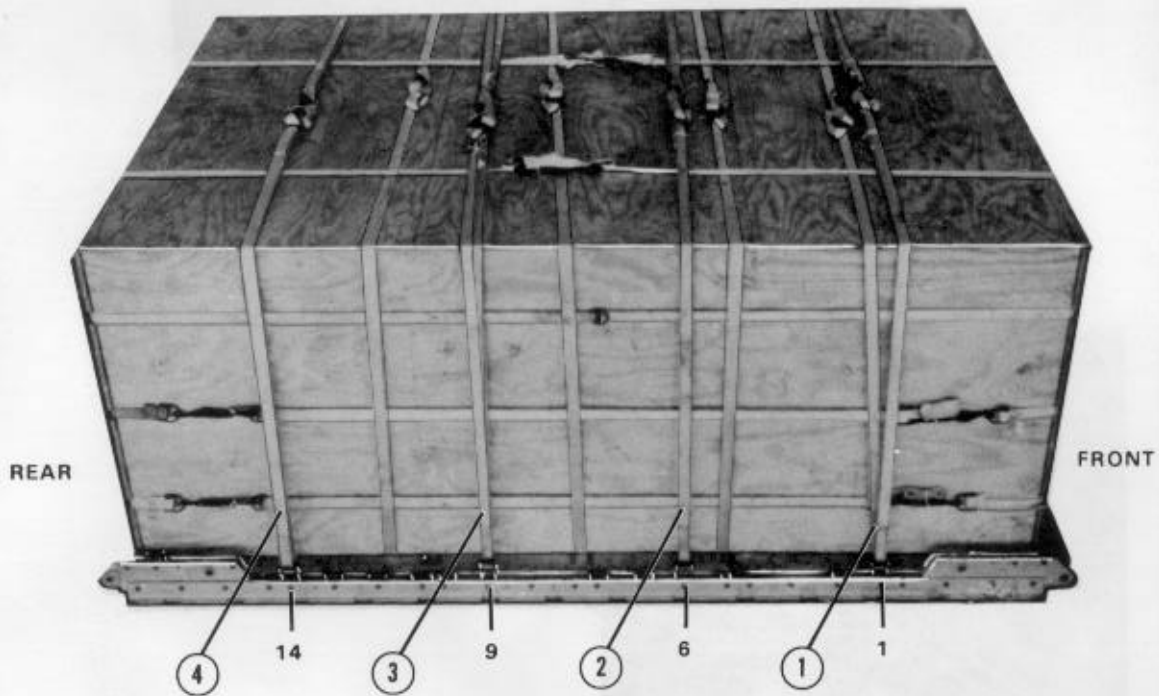


- ⑥ Pass the ends of the straps attached to tiedown rings A2 and B2 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.
- ⑦ Pass the ends of the straps attached to tiedown rings A3 and B3 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.
- ⑧ Pass the ends of the straps attached to tiedown rings A4 and B4 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.
- ⑨ Pass the ends of the straps attached to tiedown rings A5 and B5 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.
- ⑩ Pass the ends of the straps attached to tiedown rings A2 and A5 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.
- ⑪ Pass the ends of the straps attached to tiedown rings B2 and B5 to the top of the load. Hook the ends of the straps together with two D-rings and a load binder.

Figure 13-9. Box closed and secured (continued)

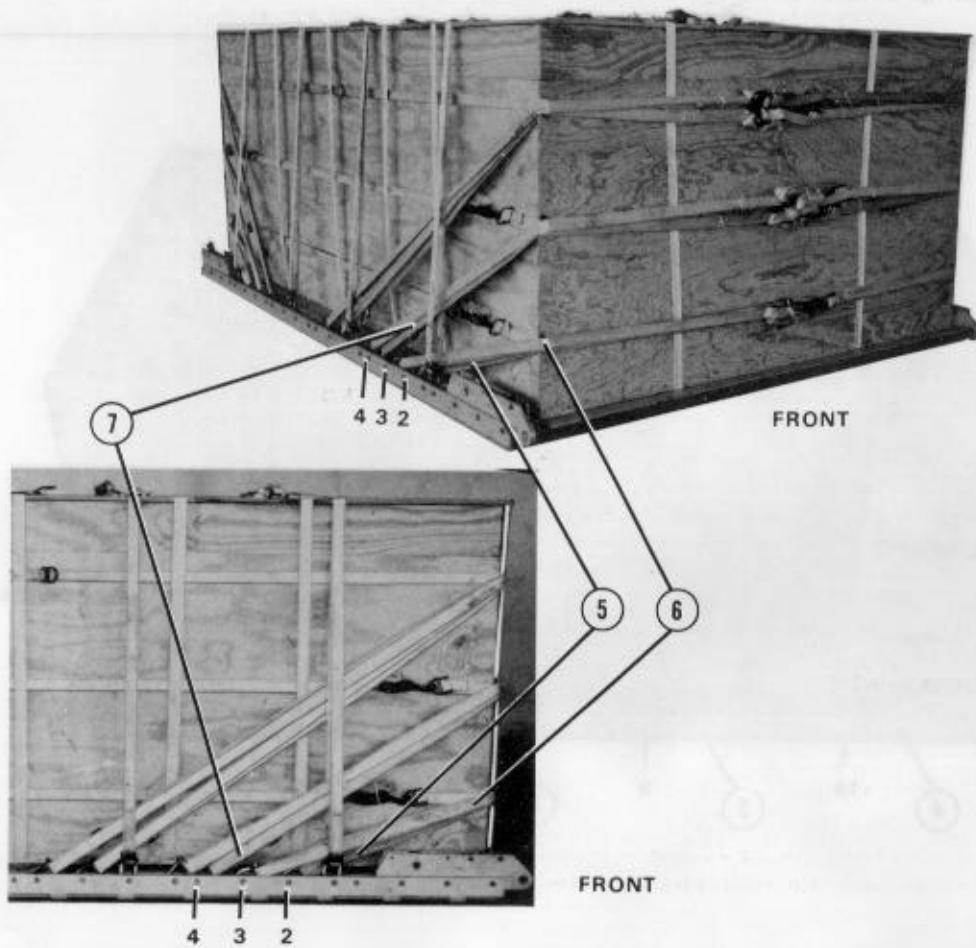
13-9. Installing Lashings

Install the lashings as shown in Figure 13-10.



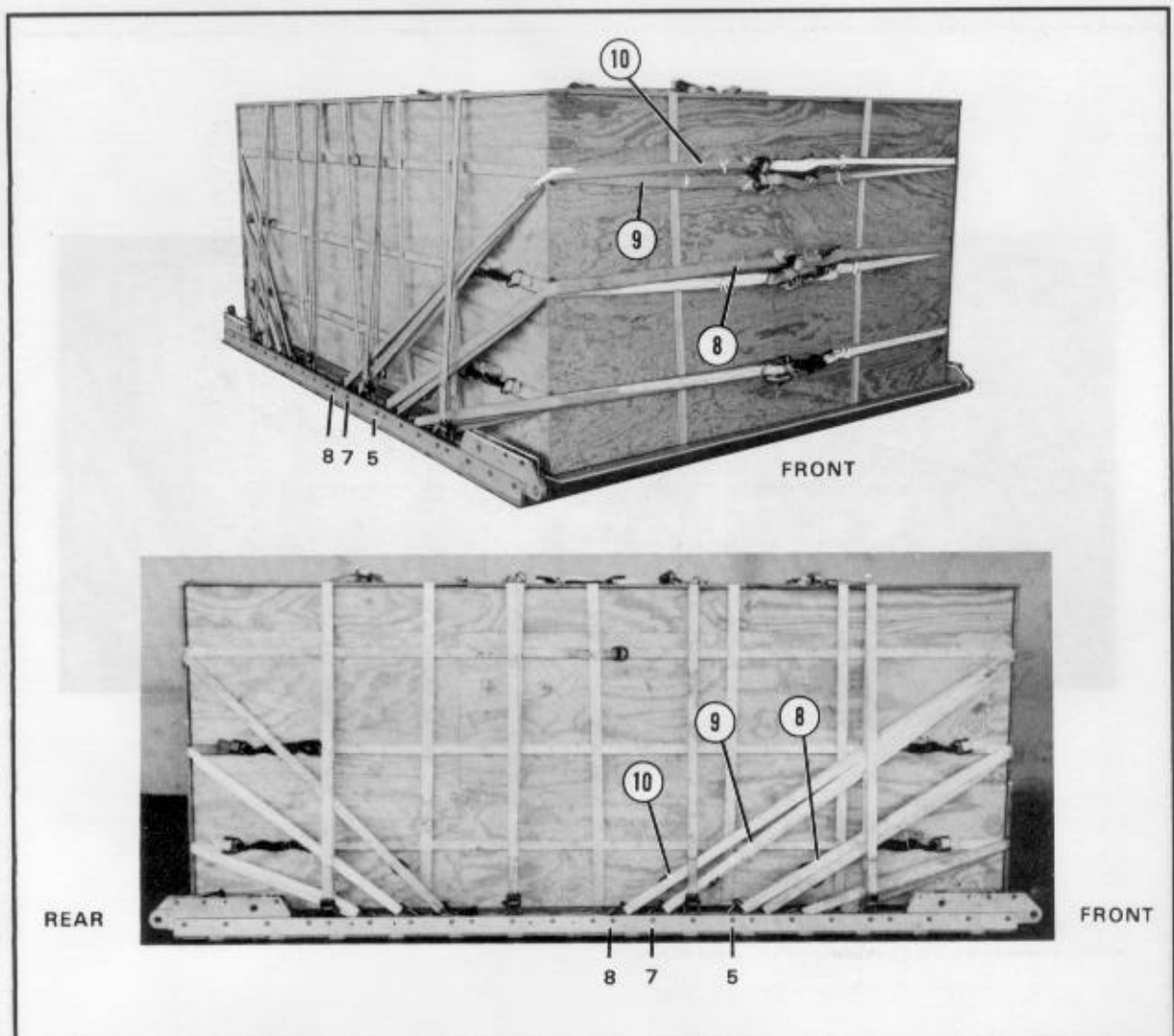
- ① Pass the free end of a 15-foot tiedown strap through clevis 1. Even the ends of the strap and place them on top of the load. Pass the free end of a 15-foot tiedown strap through clevis 1A. Even the ends of the strap and place them on top of the load. Secure the ends of the 15-foot tiedown straps with two D-rings and two load binders.
- ② Pass a 15-foot tiedown strap through clevises 6 and 6A and secure the straps as in step 1.
- ③ Pass a 15-foot tiedown strap through clevises 9 and 9A and secure the straps as in step 1.
- ④ Pass a 15-foot tiedown strap through clevises 14 and 14A and secure the straps as in step 1.

Figure 13-10. Lashings installed



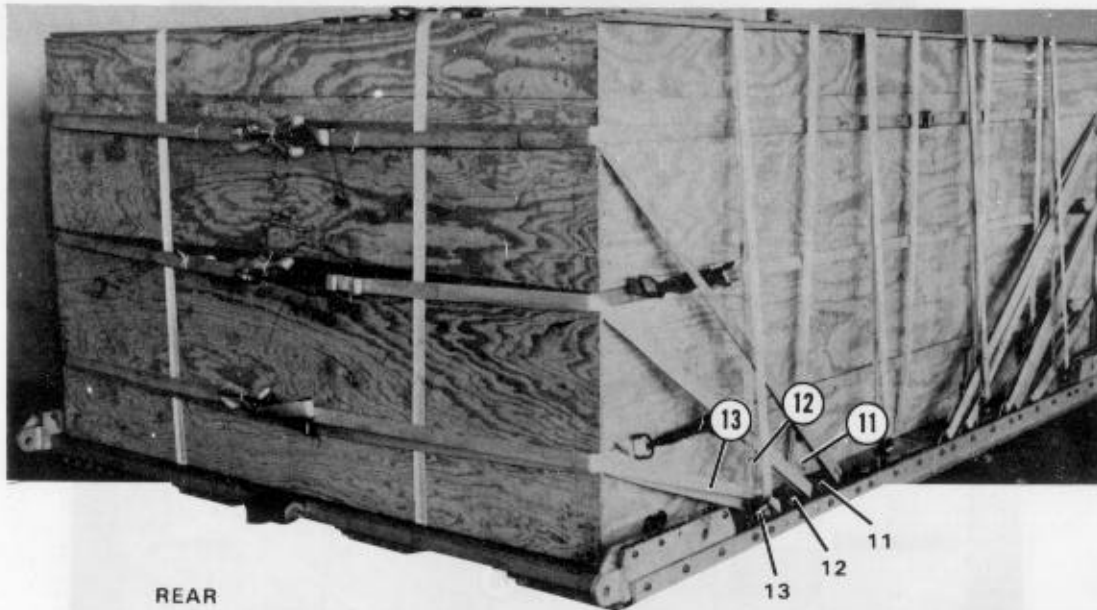
- 5 Form a 30-foot tiedown strap. Pass the free ends of the strap through the lower cutouts in the front of the storage box, through clevises 2 and 2A, and back through the lower cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- 6 Form a 30-foot tiedown strap. Pass the free ends of the strap through the lower cutouts in the front of the storage box, through clevises 3 and 3A, and back through the lower cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- 7 Form a 30-foot tiedown strap. Pass the free ends of the strap through the center cutouts in the front of the storage box, through clevises 4 and 4A, and back through the center cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.

Figure 13-10. Lashings installed (continued)



- ⑧ Form a 30-foot tiedown strap. Pass the free ends of the strap through the center cutouts in the front of the storage box, through clevises 5 and 5A, and back through the center cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- ⑨ Form a 30-foot tiedown strap. Pass the free ends of the strap through the top cutouts in the front of the storage box, through clevises 7 and 7A, and back through the top cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- ⑩ Form a 30-foot tiedown strap. Pass the free ends of the strap through the top cutouts in the front of the storage box, through clevises 8 and 8A, and back through the top cutouts to the front of the storage box. Secure the free ends of the strap with two D-rings and a load binder.

Figure 13-10. Lashings installed (continued)

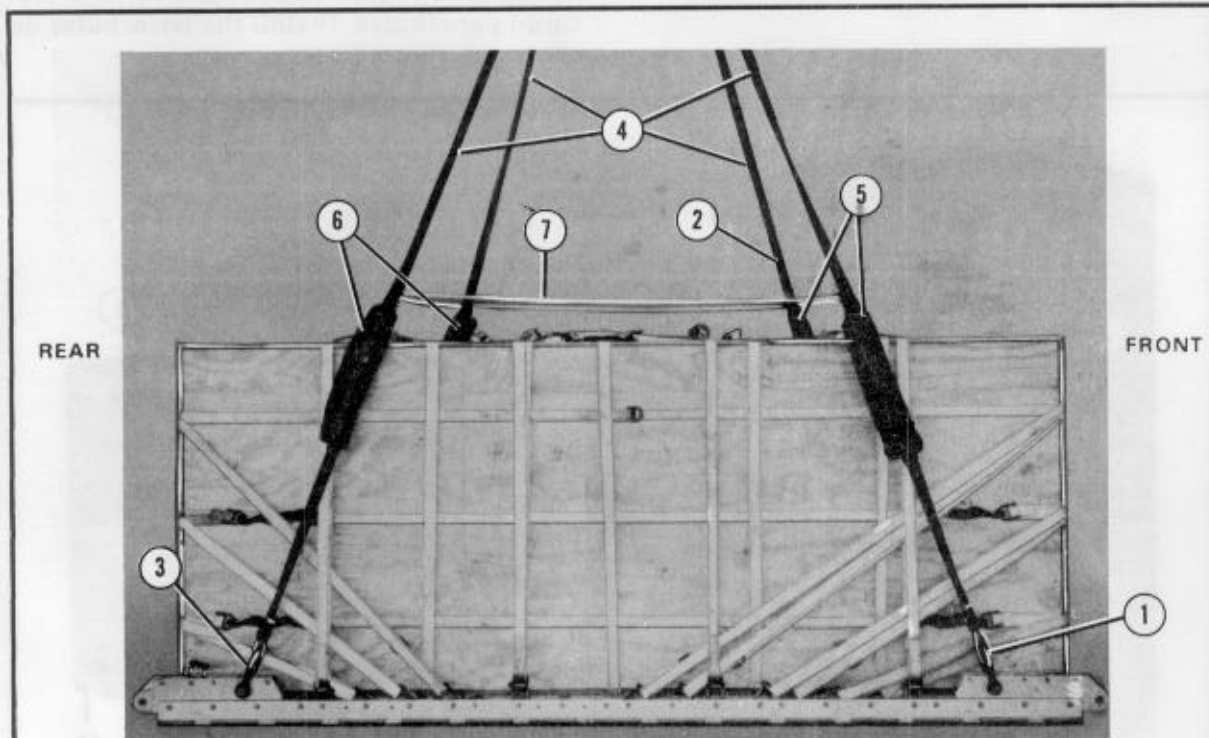


- ⑪ Form a 30-foot tiedown strap. Pass the free ends of the strap through the top cutouts in the rear of the storage box, through clevises 11 and 11A, and back through the top cutouts to the rear of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- ⑫ Form a 30-foot tiedown strap. Pass the free ends of the strap through the center cutouts in the rear of the storage box, through clevises 12 and 12A, and back through the center cutouts to the rear of the storage box. Secure the free ends of the strap with two D-rings and a load binder.
- ⑬ Form a 30-foot tiedown strap. Pass the free ends of the strap through the lower cutouts in the rear of the storage box, through clevises 13 and 13A, and back through the lower cutouts to the rear of the storage box. Secure the free ends of the strap with two D-rings and a load binder.

Figure 13-10. Lashings installed (continued)

13-10. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and deadman's tie as shown in Figure 13-11.



- ① Attach one 16-foot (2-loop), type XXVI nylon sling to the bell portion of a large clevis. Bolt the clevis to the right front tandem link.
- ② Repeat step 1 for the left front tandem link.
- ③ Repeat steps 1 and 2 for the rear tandem links.
- ④ Pull the suspension slings tight above the load.
- ⑤ Wrap a 9- by 24-inch piece of felt around each front suspension sling 44 inches from the large clevis. Tape the felt in place.
- ⑥ Repeat step 5 for the rear suspension slings.
- ⑦ Install a deadman's tie according to FM 10-500/TO 13C7-1-5.

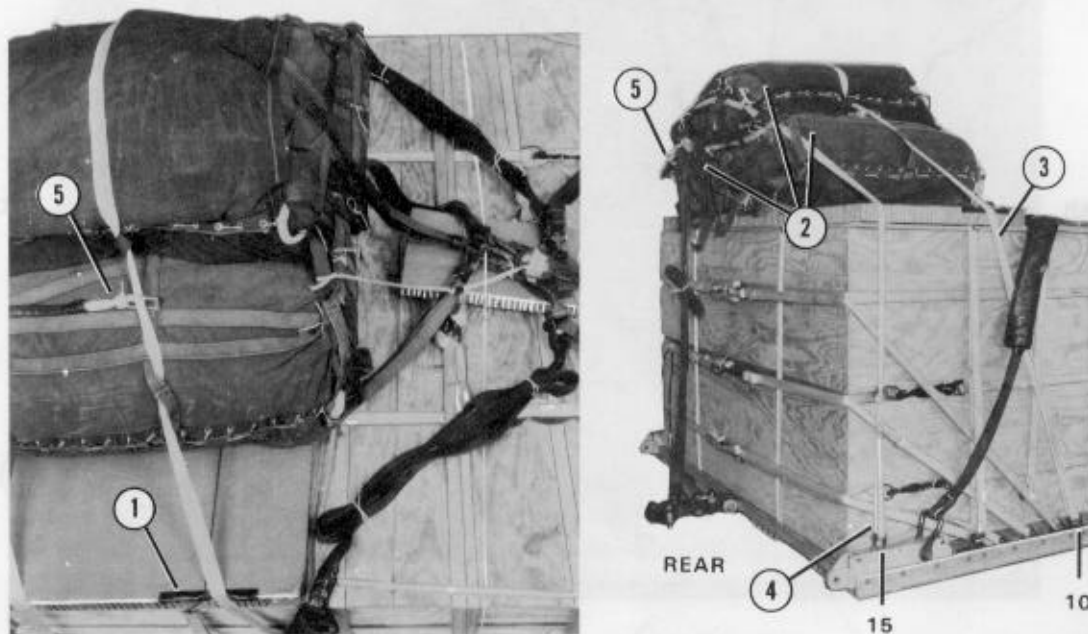
Note:

After installing the deadman's tie, lower the slings.

Figure 13-11. Suspension slings and deadman's tie installed

13-11. Installing Parachutes

Compute parachute requirements for the load being rigged. Select the correct number of G-11A, G-11B, or G-11C cargo parachutes. The load in Figure 13-12 shows three G-11B cargo parachutes. Install the parachutes as shown in Figure 13-12.

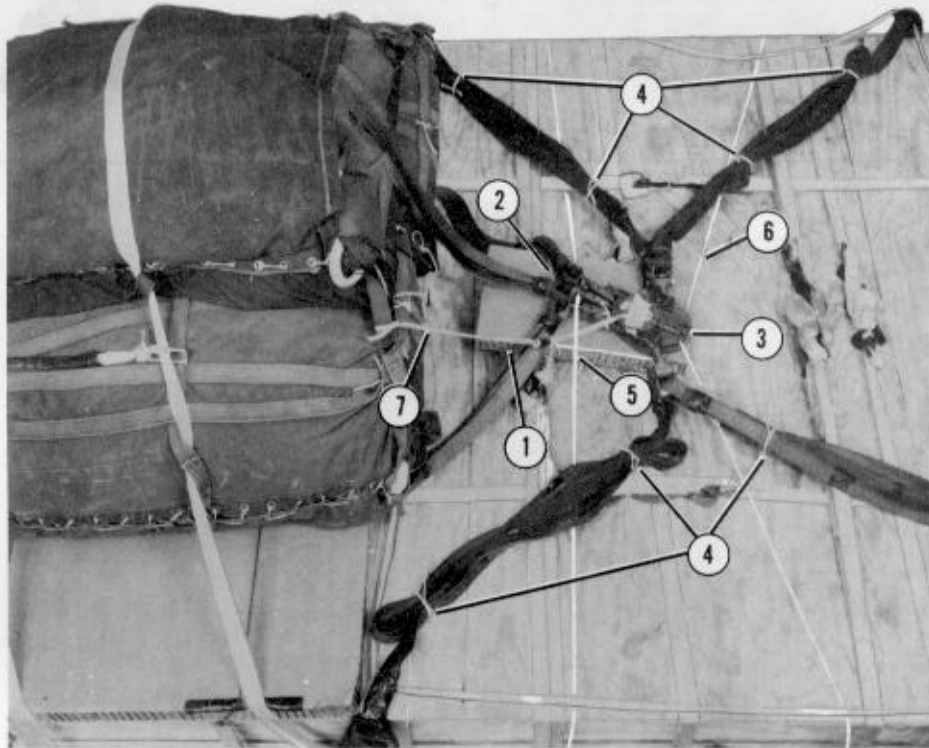


- ① Place a 36- by 96-inch piece of honeycomb at the top rear of the load. Secure the honeycomb in place with type III nylon cord. Tape the edges of the honeycomb where the cord crosses.
- ② Prepare three G-11B cargo parachutes and position them on the rear of the load as shown. Each parachute requires a 40-foot riser extension. The riser extensions must meet the requirements and restrictions in FM 10-500/TO 13C7-1-5.
- ③ Install a type VIII nylon webbing parachute restraint strap over the top of the cargo parachutes according to the procedures in FM 10-500/TO 13C7-1-5. Secure the ends of the strap to tiedown clevises 10 and 10A.
- ④ Install a type VIII nylon webbing parachute restraint strap on the rear of the parachutes according to the procedures in FM 10-500/TO 13C7-1-5. Secure the ends of the strap to tiedown clevises 15 and 15A.
- ⑤ Install two multicut parachute release straps according to FM 10-500/TO 13C7-1-5.

Figure 13-12. Parachutes installed

13-12. Installing Release System

Prepare and install the release system as shown in Figure 13-13.

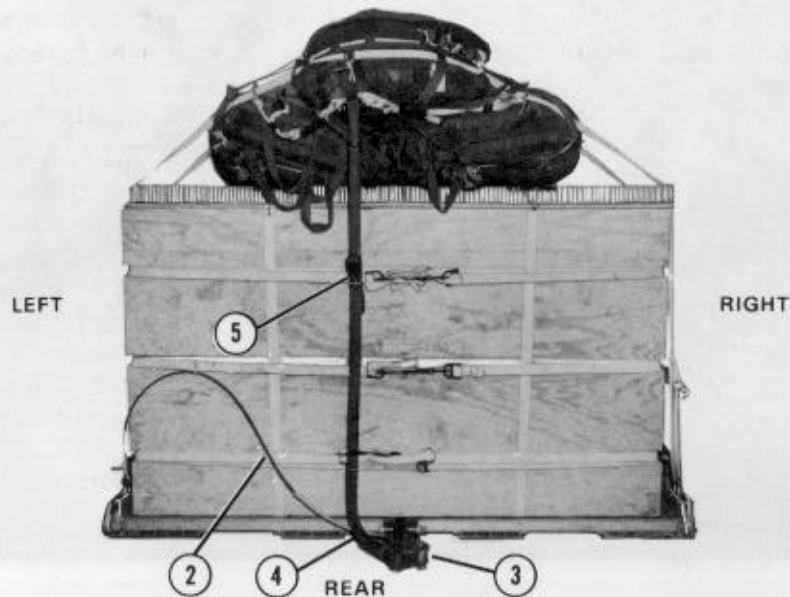
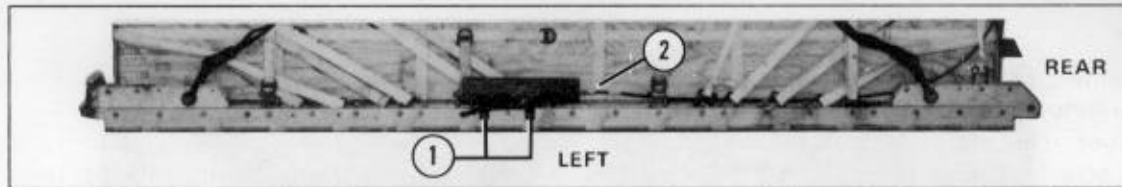


- ① Center a 12- by 24-inch piece of honeycomb on top of the load 12 inches in front of the parachutes.
- ② Tie the honeycomb in place with a length of type III nylon cord.
- ③ Prepare an M-1 cargo parachute release assembly according to FM 10-500/TO 13C7-1-5. Center the release assembly on the honeycomb positioned in step 1. Attach the release assembly to the suspension slings and the cargo parachutes according to FM 10-500/TO 13C7-1-5.
- ④ Fold the suspension slings, and secure the folds with lengths of 80-pound cotton webbing.
- ⑤ Secure the top of the release assembly according to FM 10-500/TO 13C7-1-5.
- ⑥ Secure the bottom of the release assembly according to FM 10-500/TO 13C7-1-5.
- ⑦ Install the arming lanyard according to FM 10-500/TO 13C7-1-5.

Figure 13-13. Release system installed

13-13. Installing Extraction System

Install the EFTC extraction system as shown in Figure 13-14.



- ① Attach the type V EFTA mounting brackets to the rear mounting holes in the left platform side rail.
- ② Install the actuator (with a 12-foot release cable) to the EFTA mounting brackets according to FM 10-500/TO 13C7-1-5.
- ③ Use a 5 1/2-inch latch assembly adapter, and attach latch assembly to the extraction bracket according to FM 10-500/TO 13C7-1-5 with the locking nut hole facing toward the left side of the platform.
- ④ Connect one end of a 9-foot (2-loop), type XXVI or a 9-foot (3-loop), type X nylon webbing sling (deployment line) to the left spacer of the link assembly. Connect the free end of the deployment line to the center large suspension clevis on the parachutes.
- ⑤ Fold the excess deployment line, and secure the folds in place with tape or 80-pound cotton webbing.

Figure 13-14. Extraction system installed

13-14. Installing Provisions for Emergency Restraints

Attach a medium (3/4-inch) suspension clevis to the front hole on the front tandem links.

Note:

The emergency restraints will be installed to the emergency restraint points in the aircraft. The clevises used as emergency restraint points may also be placed on the load and installed later in the aircraft.

13-15. Positioning Extraction Parachute

Position the extraction parachute as described below.

a. C-130 Aircraft. Place one 22-foot, heavy-duty cargo extraction parachute; a 60-foot (3-loop), type X or type XXVI nylon webbing extraction line; and a four-point link assembly on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 8,001 pounds, a 60-foot (3-loop), type X or type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

b. C-141 Aircraft. Place one 22-foot, heavy-duty cargo extraction parachute and a continuous 140-foot (3-loop), type XXVI nylon webbing extraction line on the load for installation in the aircraft.

Note:

When the rigged load weighs more than 8,001 pounds, a continuous 140-foot (3-loop), type XXVI nylon extraction line; a 22-foot cargo extraction parachute; and a 3 3/4-inch, two-point link assembly are required.

13-16. Marking Rigged Load

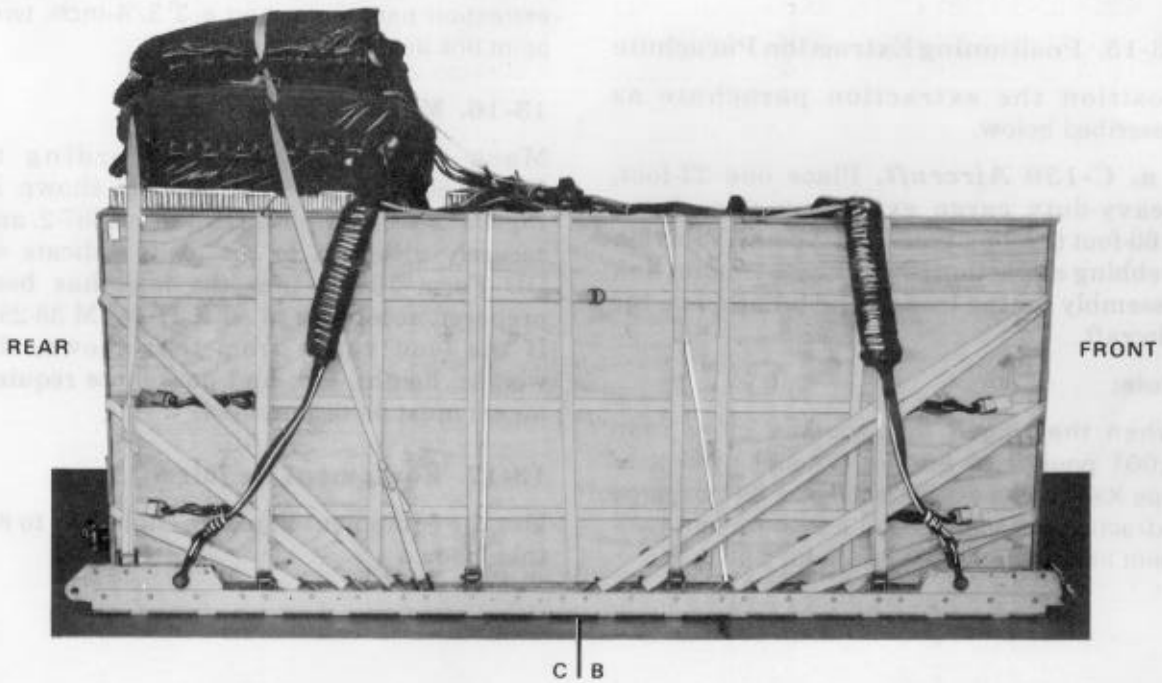
Mark the rigged load according to FM 10-500/TO 13C7-1-5 and as shown in Figure 13-15. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load has been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, height, CB, and parachute requirements must be recomputed.

13-17. Equipment Required

Use the equipment listed in Table 13-1 to rig this load.

CAUTION

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



RIGGED LOAD DATA

Weight:	Load shown	12,000 pounds
	Maximum allowable	12,000 pounds
Height		92 inches
Width		108 inches
Length		168 inches
Overhang:	Front	4 1/2 inches
	Rear	19 1/2 inches
CB (from front edge of platform)		84 inches
Extraction system (shown)		EFTC

Figure 13-15. FAST equipment rigged on a type V platform for low-velocity airdrop

Table 13-1. Equipment required for rigging FAST equipment on a type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
1670-01-062-6312	Adapter, web, 36-in	1
8040-00-273-8713	Adhesive, paste, 1-gal	As required
4030-00-678-8562	Clevis, suspension, 3/4-in (medium)	1
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5783	Coupling, airdrop, extraction force transfer, w 12-ft cable	1
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI nylon webbing (for C-130) <u>or</u>	1
1670-00-856-0266	60-ft (3-loop), type X nylon webbing <u>or</u>	1
1670-01-062-6313	60-ft (3-loop), type XXVI nylon webbing	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141) <u>or</u>	1
1670-01-107-7652	160-ft (1-loop), type XXVI nylon webbing	1
	Link assembly:	
1670-00-003-1953	Two-point, plate side, 3 3/4-inch (for extraction line)	3
1670-00-783-5988	Type IV (for extraction line)	1
5510-00-220-6146	Lumber, 2- by 4- by 60-in	14
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	8 sheets
	12- by 24-in	(1)
	36- by 96-in	(6)
1670-01-183-2678	Leaf, extraction line (line bag)	2
	Parachute, cargo:	
1670-00-269-1107	G-11A <u>or</u>	3
1670-01-016-7841	G-11B <u>or</u>	3
1670-01-016-7841	G-11C	3
	Parachute, cargo extraction:	
1670-00-052-1548	15-ft <u>or</u>	1
1670-01-063-3715	15-ft (new)	1
1670-00-687-5458	22-ft <u>or</u>	1
1670-01-063-3716	22-ft (new)	1
	Platform, AD, type V, 12-ft:	
	Bracket:	
1670-01-162-2375	Inside EFTA	1
1670-01-162-2374	Outside EFTA	1
1670-01-162-2385	Bumper, nose	1
1670-01-162-2372	Clevis, load tiedown	30
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-in	8 sheets
1670-01-097-8816	Release, cargo parachute, M-1	1

Table 13-1. Equipment required for rigging FAST equipment on a type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
	Sling, cargo airdrop:	
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing <u>or</u>	1
1670-00-753-3631	9-ft (3-loop), type X nylon webbing	
	(deployment line)	1
1670-00-753-3793	16-ft (2-loop), type X nylon webbing <u>or</u>	4
1670-01-063-7761	16-ft (2-loop), type XXVI nylon webbing	4
1670-00-753-3794	20-ft (2-loop), type X nylon webbing	6
	(riser extensions) <u>or</u>	
1670-01-062-6302	20-ft (2-loop), type XXVI nylon webbing	6
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	69
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-082-5752	Nylon, tubular, 1/2-in, 1,000-lb, natural	As required
8305-00-263-3591	Nylon, type VIII, 3,600-lb	As required

CHAPTER 15

**RIGGING SUPPLY LOADS ON A 16-FOOT, TYPE V
PLATFORM FOR LOW-VELOCITY AIRDROP**

Section I

RIGGING 105-MILLIMETER AMMUNITION**15-1. Description of Load**

Bulk supplies consisting of rations, equipment, gasoline, ammunition, or other items of general supply are rigged on a 16-foot, type V platform with G-11B cargo parachutes. One hundred and forty boxes of 105-millimeter ammunition are shown. All 105-millimeter ammunition packaged as shown and listed in FM 10-500-53/TO 13C7-18-41, as certified for low-velocity airdrop, may be rigged using these procedures. All loads will be platform suspended. Each load must weigh at least 5,040 pounds, including parachutes, but must not weigh more than 27,000 pounds, including parachutes. The rigged load may not be more than 100 inches high. Refer to FM 10-500-2/TO 13C7-1-5 for the weight limitations for the number of parachutes to be used.

15-2. Preparing Platform

Prepare a 16-foot, type V airdrop platform as described below.

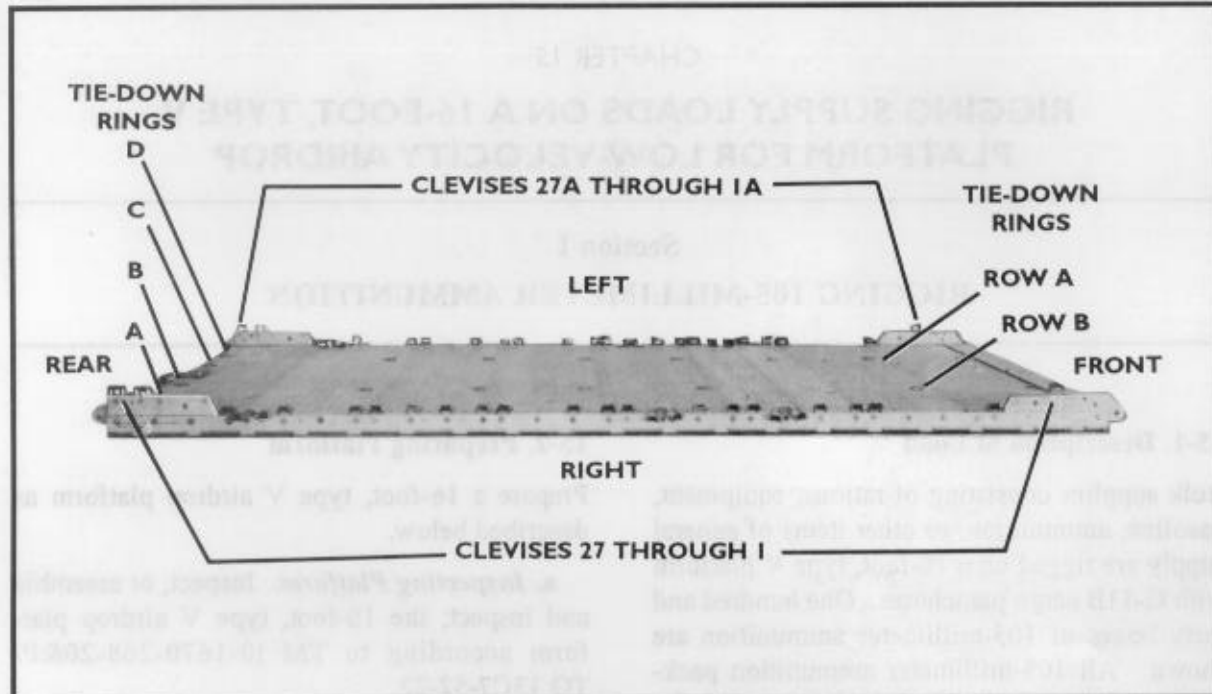
a. *Inspecting Platform.* Inspect, or assemble and inspect, the 16-foot, type V airdrop platform according to TM 10-1670-268-20&P/TO 13C7-52-22.

b. *Installing Tandem Links.* Install tandem links on the front and rear of each rail as shown in Figure 15-1.

c. *Installing and Numbering Clevises.* Bolt and number 60 clevis assemblies as shown in Figure 15-1.

Notes:

1. The nose bumper may or may not be installed.
2. 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 tandem link on the front of each platform side rail using holes 1, 2, and 3.
2. Install a tandem link on the rear of each platform side rail using holes 30, 31, and 32.
3. Install a clevis on bushing 3 of each front tandem link.
4. Install clevises on bushings 3 and 4 of each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28 and 29. Reverse the clevises on holes 11, 15, and 28. Install two clevises on each of the reversed clevises.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 27, and those bolted to the left side from 1A through 27A.
7. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

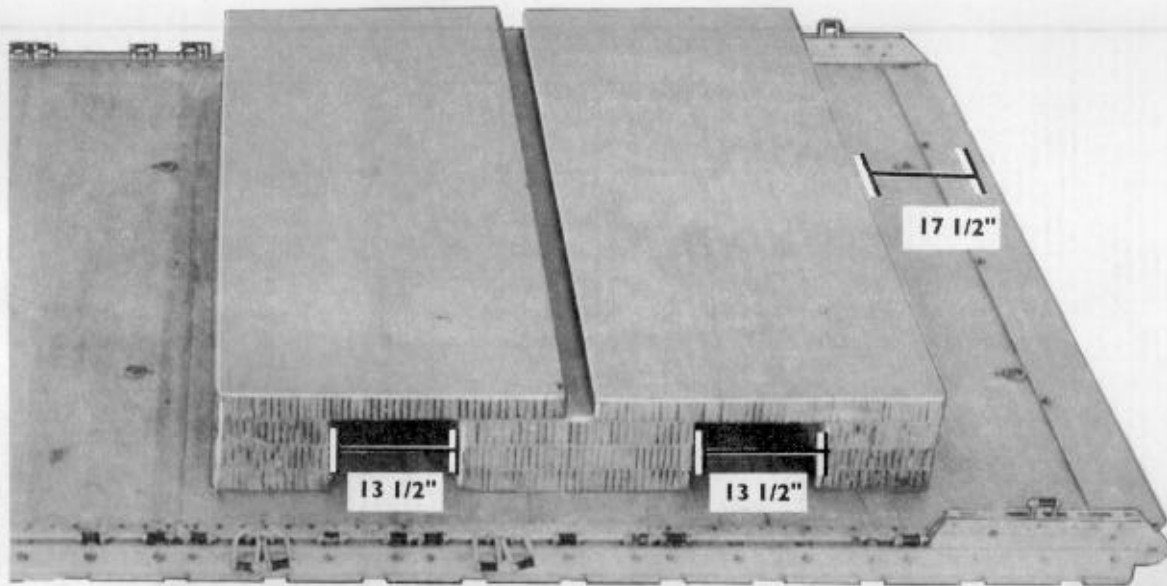
Figure 15-1. Platform prepared

15-3. Building Honeycomb Stacks and Placing First Stack

Build the honeycomb stack for the first stack of ammunition and place it on the platform as shown in Figure 15-2. Build the stack for the second stack of ammunition as shown in Figure 15-2. Set the second honeycomb stack aside.

Note:

When rigging this load for airdrop on a drop zone with a ground elevation of 6,000 to 10,000 feet, add another layer of honeycomb to each stack. However, the height of the load cannot exceed 100 inches.

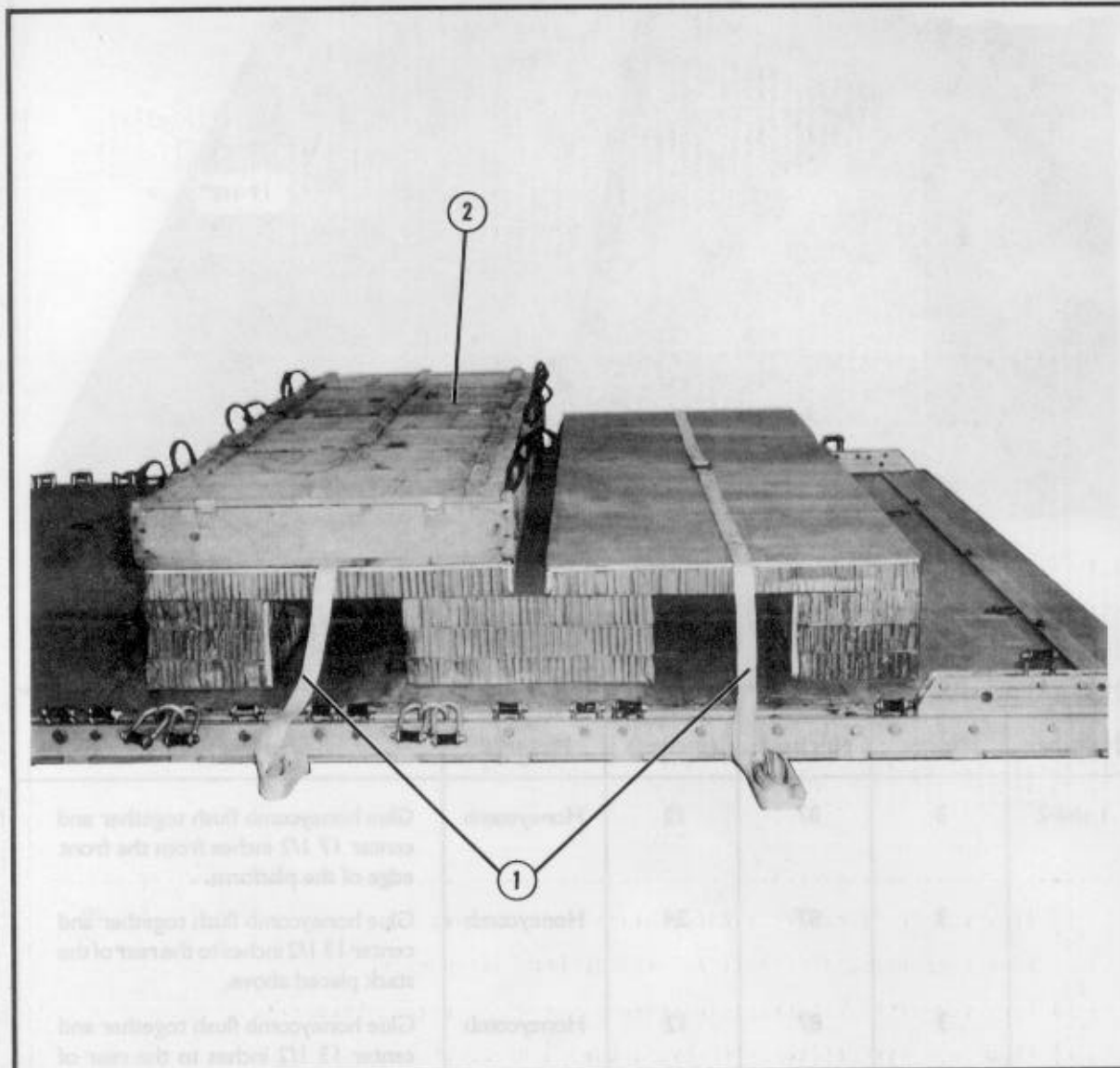


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1 and 2	3	87	12	Honeycomb	Glue honeycomb flush together and center 17 1/2 inches from the front edge of the platform.
	3	87	24	Honeycomb	Glue honeycomb flush together and center 13 1/2 inches to the rear of the stack placed above.
	3	87	12	Honeycomb	Glue honeycomb flush together and center 13 1/2 inches to the rear of the stack placed above.
	2	87	36	Honeycomb	Glue one piece flush over the front edge, and glue one piece flush over the rear edge, leaving a 3-inch gap in the center.

Figure 15-2. Honeycomb for first ammunition stack prepared and placed

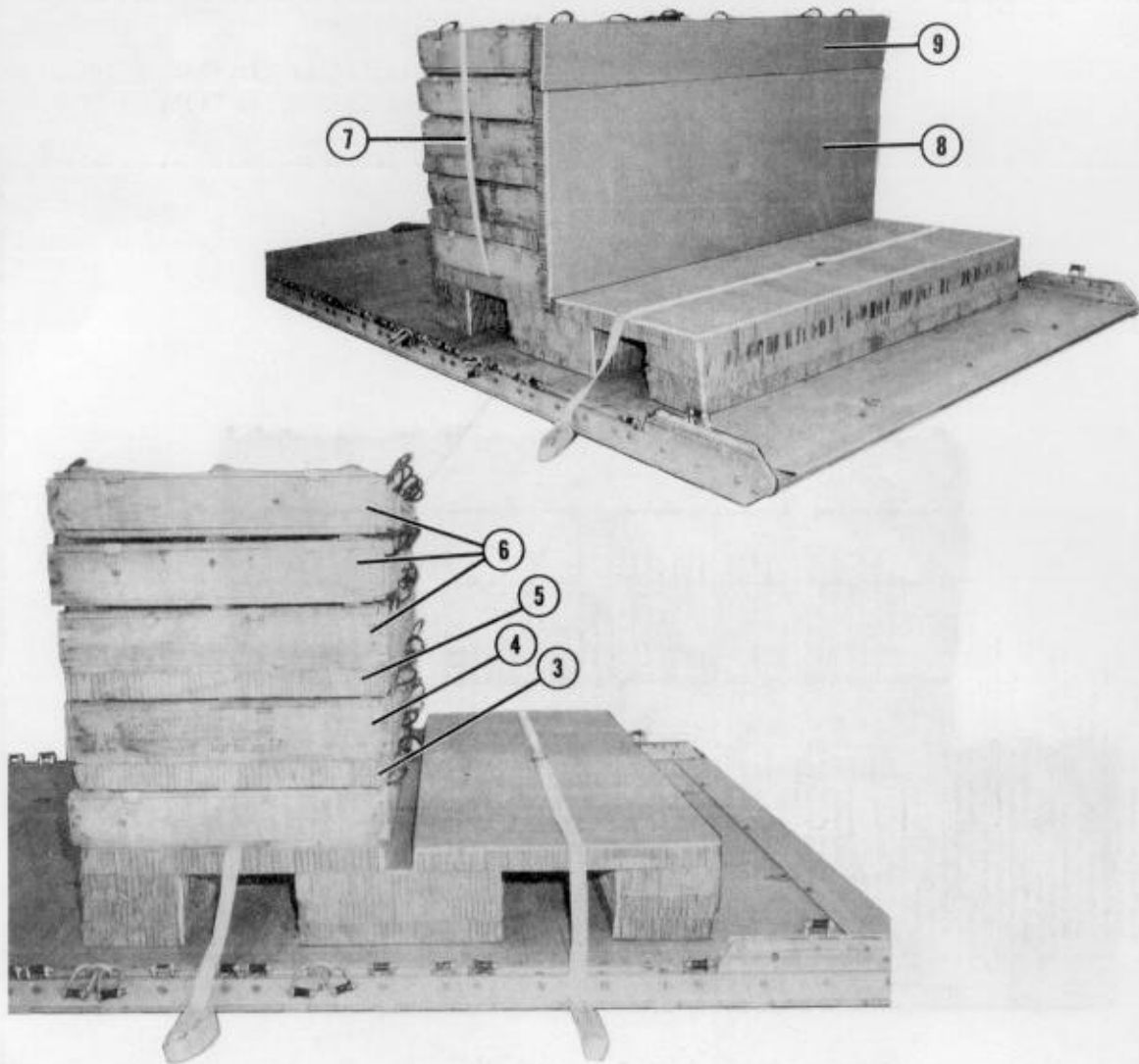
15-4. Positioning and Securing First Ammunition Stack

Position and secure the first stack of 105-millimeter ammunition as shown in Figure 15-3.



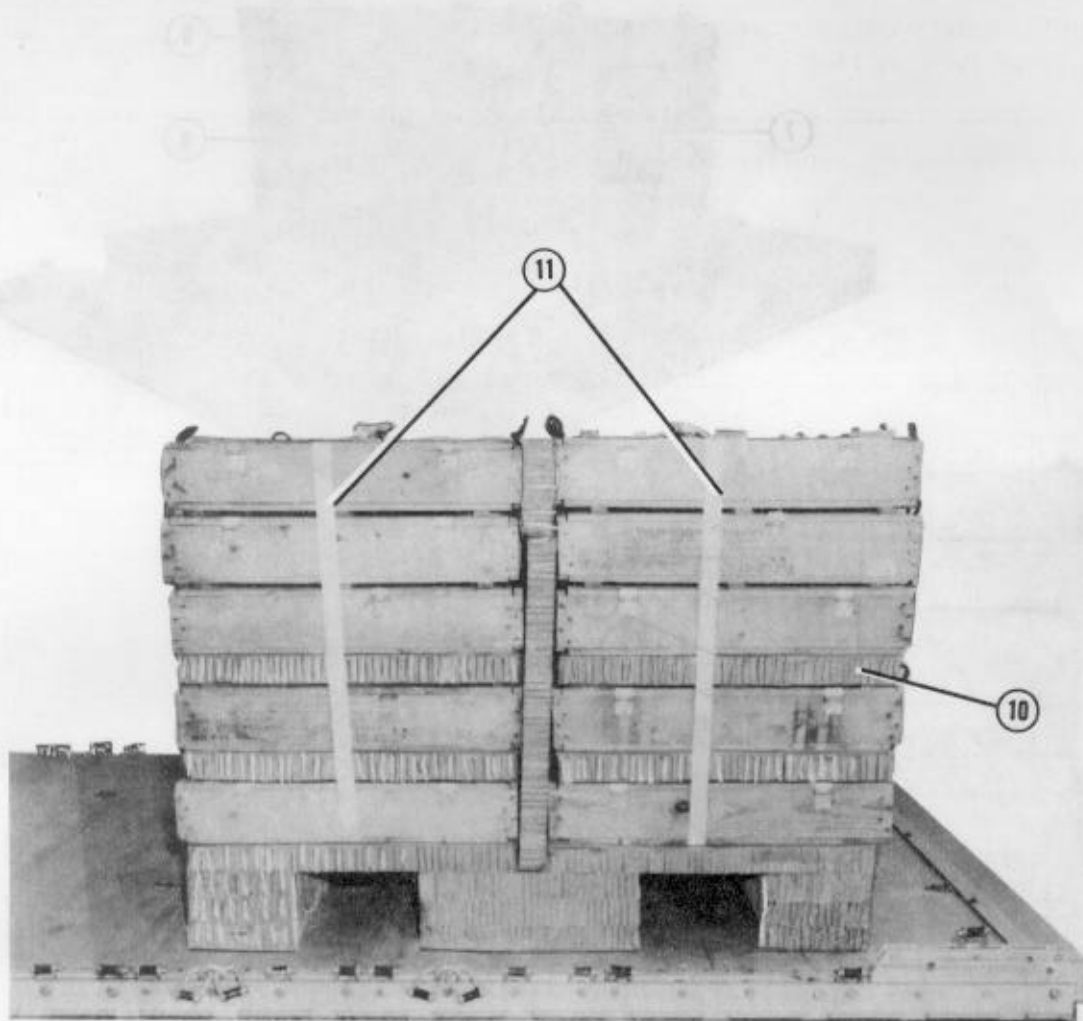
- ① Form two 30-foot lashings according to FM 10-500-2/TO 13C7-1-5. Center them over the honeycomb as shown.
- ② Place seven ammunition boxes on the rear side of stack 1. Let the boxes overhang the rear edge by 1 inch.

Figure 15-3. Ammunition positioned and secured



- ③ Place a 36- by 87-inch piece of honeycomb over the boxes.
- ④ Place seven ammunition boxes flush with the first layer of boxes.
- ⑤ Place a 36- by 87-inch piece of honeycomb over the boxes placed in step 4.
- ⑥ Place three layers of boxes flush over the layers already placed.
- ⑦ Secure the pre-positioned lashing over the boxes.
- ⑧ Place a 36- by 87-inch piece of honeycomb on edge against the boxes. Fit the honeycomb into the 3-inch slot in the center of the honeycomb stack.
- ⑨ Place a 10- by 87-inch piece of honeycomb on edge over the piece placed in step 8.

Figure 15-3. Ammunition positioned and secured (continued)



- ⑩ Place 35 boxes of ammunition and two 36-by-87-inch pieces of honeycomb as described in steps 2 through 6 to complete stack 1.
- ⑪ Secure the pre-positioned lashing over the boxes.

Figure 15-3. Ammunition positioned and secured (continued)

15-5. Constructing and Placing Endboards

Construct four endboards and place them on the load as shown in Figure 15-4.

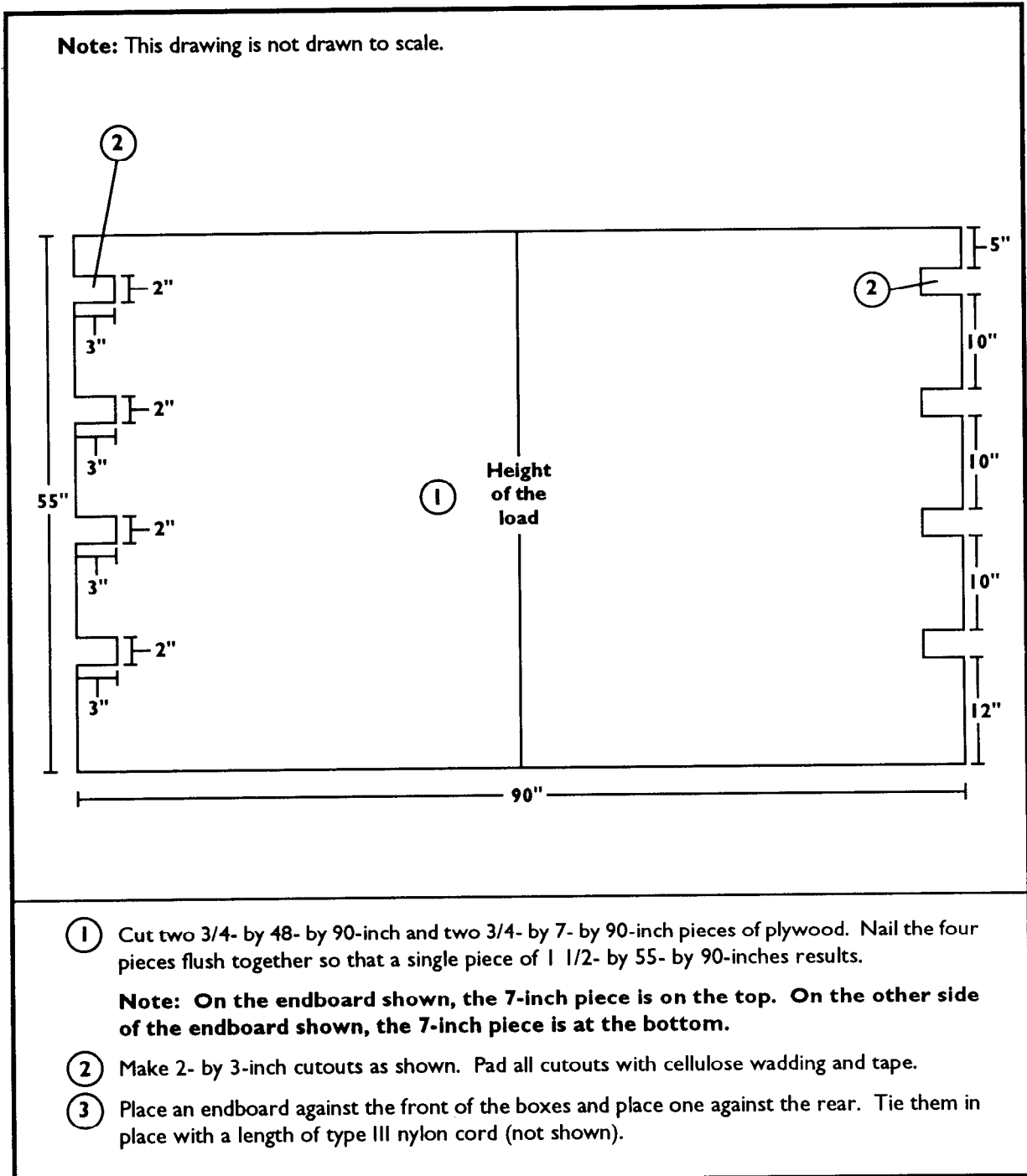


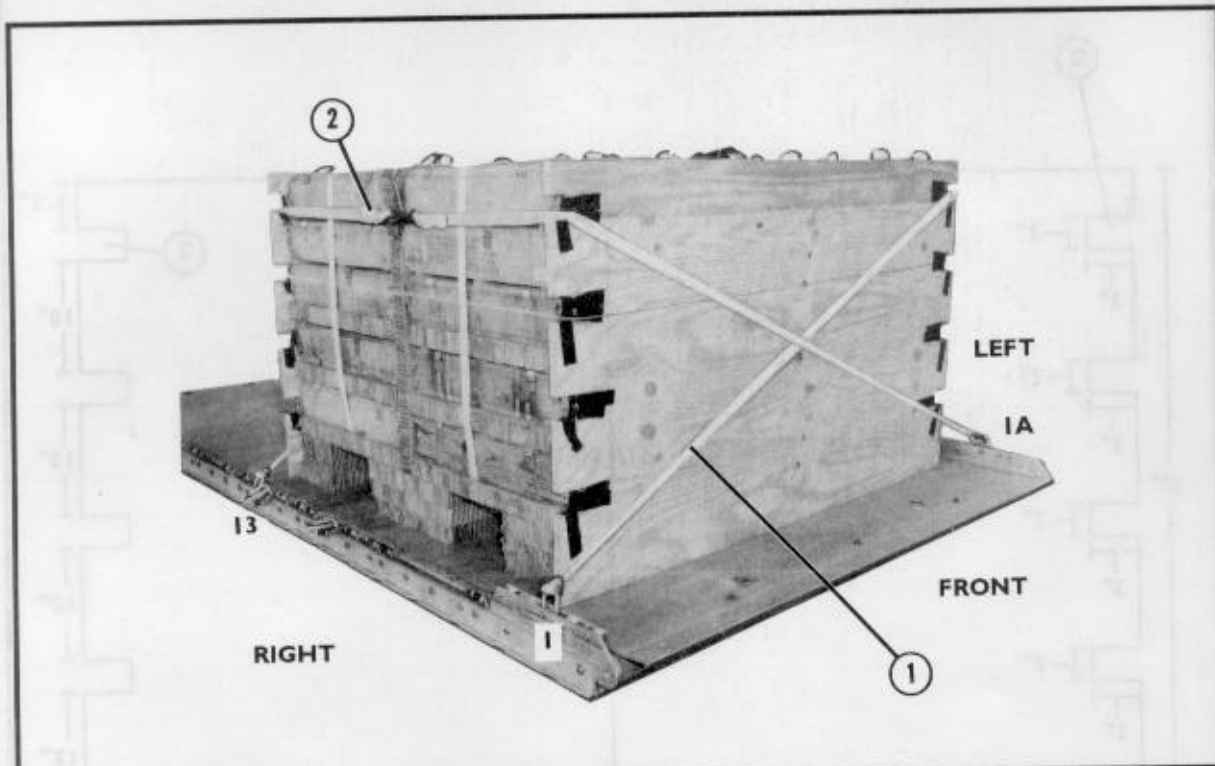
Figure 15-4. Endboards for 105-millimeter ammunition constructed

15-6. Installing Lashings on First Ammunition Stack

Lash the load to the platform according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 15-5 through 15-8. Lash the first stack to the platform as shown in Figure 15-5.

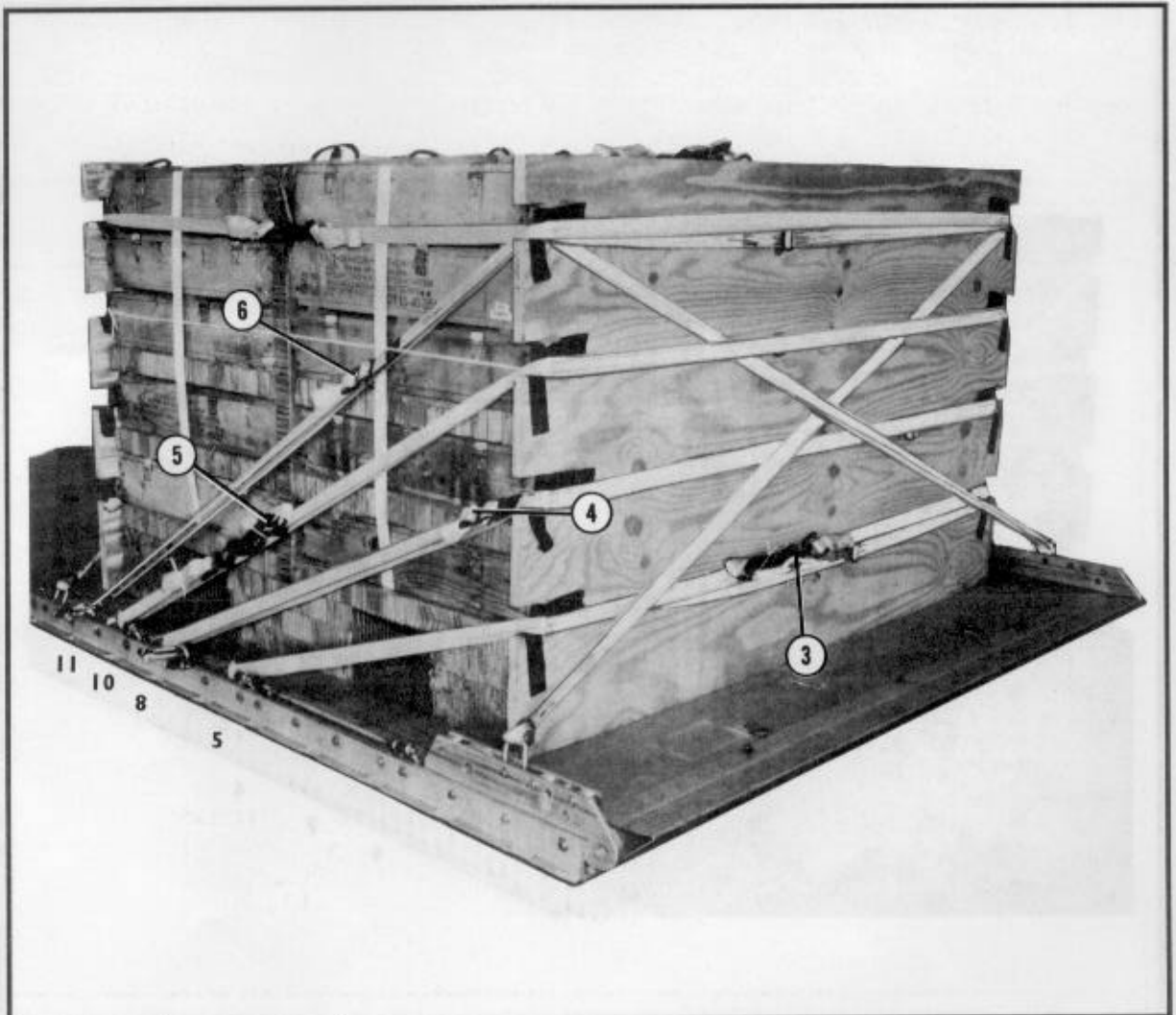
Note:

This load requires lashings of over 30 feet in length. Lashings must be positioned through clevises before sections are joined together.



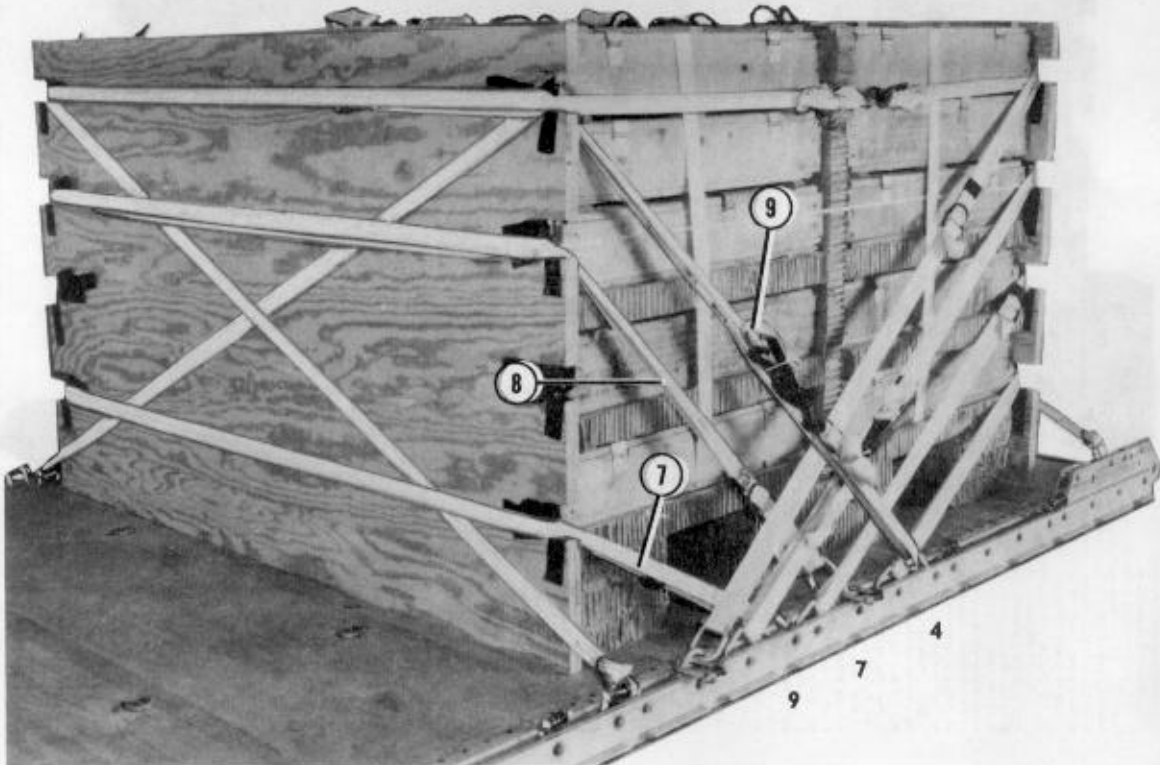
Lashing Number	Tie-Down Clevis Number	Instructions
1	1 and 13	Pass a 15-foot lashing through clevis 1 and through its own D-ring. Pass the lashing through the top left cutout in the front endboard. Pass a 15-foot lashing through clevis 13 and through its own D-ring. Pass the lashing through the top left cutout in the rear endboard. Secure the lashings on the left side.
2	IA and 13A	Pass a 15-foot lashing through clevis IA and through its own D-ring. Pass the lashing through the top right cutout in the front endboard. Pass a 15-foot lashing through clevis 13A and through its own D-ring. Pass the lashing through the top right cutout in the rear endboard. Secure the lashings on the right side.

Figure 15-5. Lashings installed for first stack



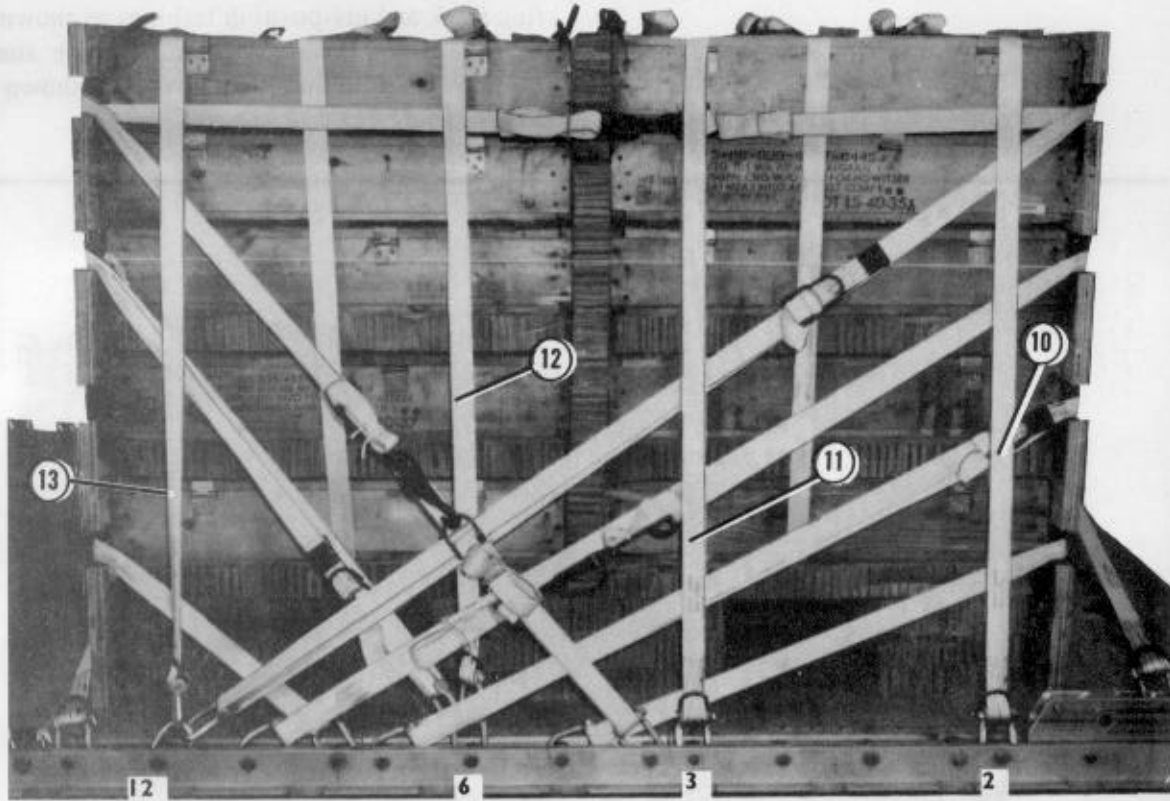
Lashing Number	Tie-Down Clevis Number	Instructions
3	5 and 5A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the front endboard. Secure the lashing in the front.
4	8 and 8A	Pass a 45-foot lashing through both clevises and through the second cutouts in the front endboard. Secure the lashing on the side.
5	10 and 10A	Pass a 45-foot lashing through both clevises and through the third cutouts in the front endboard. Secure the lashing on the side.
6	11 and 11A	Pass a 45-foot lashing through both clevises and through the top cutouts in the front endboard. Secure the lashing on the side.

Figure 15-5. Lashings installed for first stack (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
7	9 and 9A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the rear endboard. Secure the lashing on the side.
8	7 and 7A	Pass a 45-foot lashing through both clevises and through the third cutouts from the bottom in the rear endboard. Secure the lashing on the side.
9	4 and 4A	Pass a 45-foot lashing through both clevises and through the upper cutouts in the rear endboard. Secure the lashing on the side.

Figure 15-5. Lashings installed for first stack (continued)

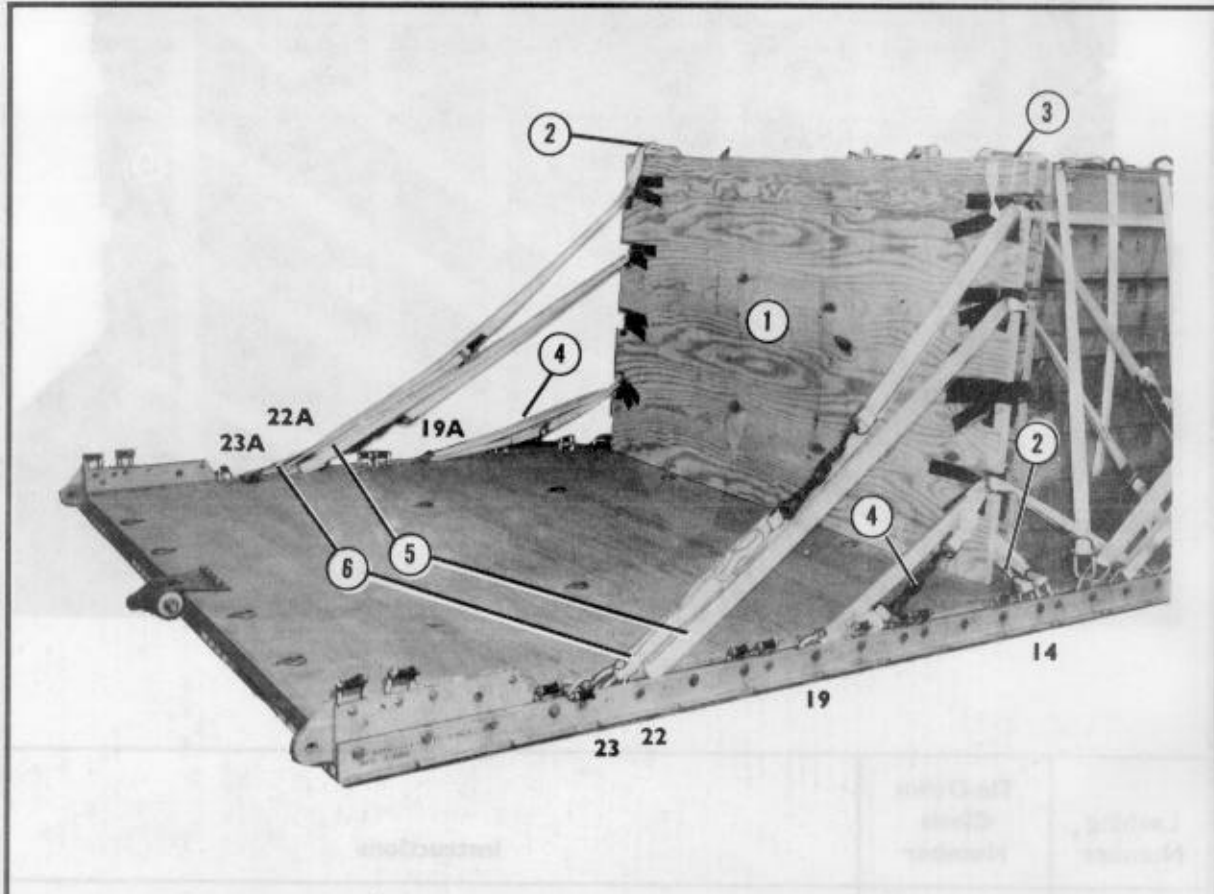


Lashing Number	Tie-Down Clevis Number	Instructions
10	2 and 2A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass both lashings over the load and secure them on top.
11	3 and 3A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass both lashings over the load and secure them on top.
12	6 and 6A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass both lashings over the load and secure them on top.
13	12 and 12A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass both lashings over the load and secure them on top.

Figure 15-5. Lashings installed for first stack (continued)

15-7. Positioning and Securing Second Ammunition Stack

Place the first endboard for the second ammunition stack and pre-position lashings as shown in Figure 15-6. Position the honeycomb stack, lashings, and ammunition boxes as shown in Figure 15-7.

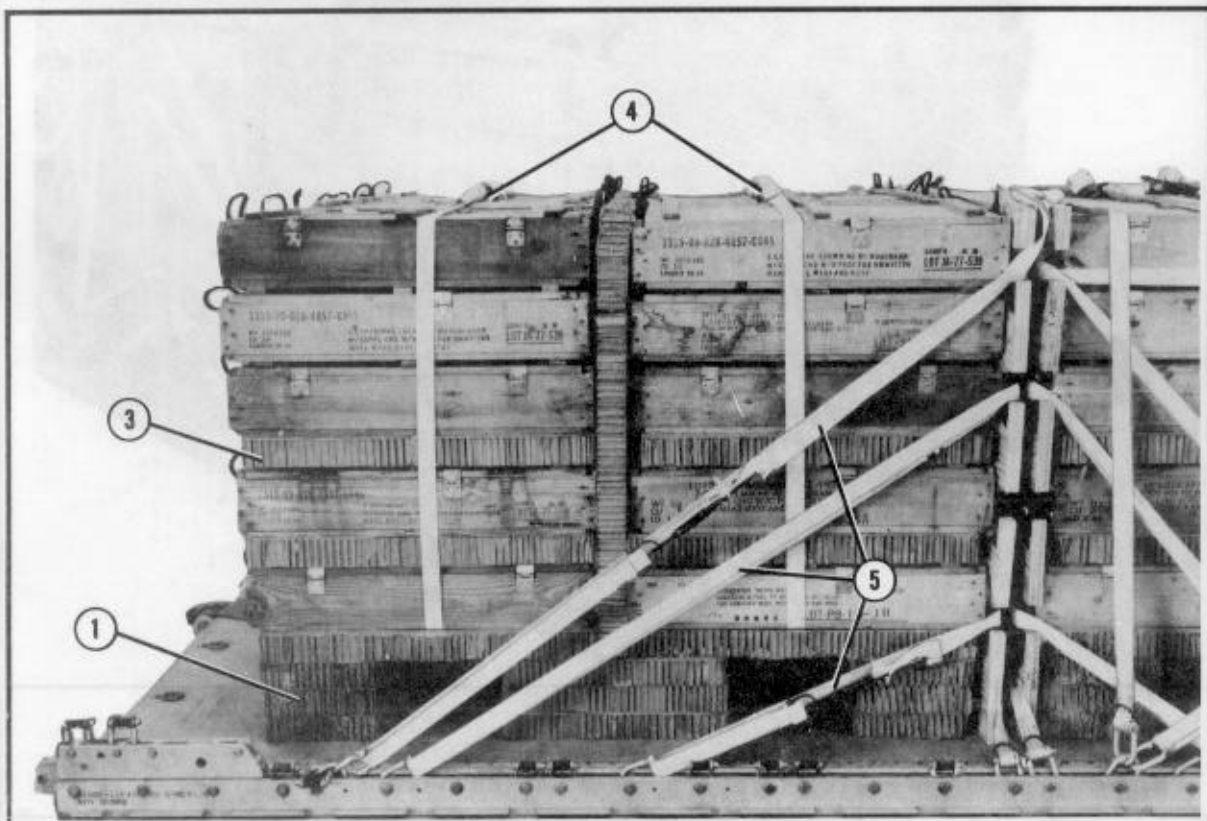


- ① Stand an endboard against the rear endboard of the first stack. Temporarily secure it to the rear endboard with type III nylon cord.
- ② Pass a 15-foot lashing through clevis 14 and through its own D-ring. Pass the lashing through the top cutout on the left side of the endboard placed in step 1. Fold the free end and place it on top of the endboards.
- ③ Pass a 15-foot lashing through clevis 14A and through its own D-ring. Pass the lashing through the top cutout on the right side of the endboard placed in step 1. Fold the free end and place it on top of the endboards.

Figure 15-6. Endboard for second stack placed and lashings pre-positioned

- ④ Pass a 30-foot lashing through clevises 19 and 19A and through the bottom slots of the endboard. Position the load binder on one side. Leave the load binder open.
- ⑤ Pass a 45-foot lashing through clevis 22 and 22A and through the second slots from the top of the endboard. Position the load binder on one side. Leave the load binder open.
- ⑥ Pass a 45-foot lashing through clevises 23 and 23A and through the top slots of the endboard. Position the load binder on one side. Leave the load binder open.

Figure 15-6. Endboard for second stack placed and lashings pre-positioned (continued)



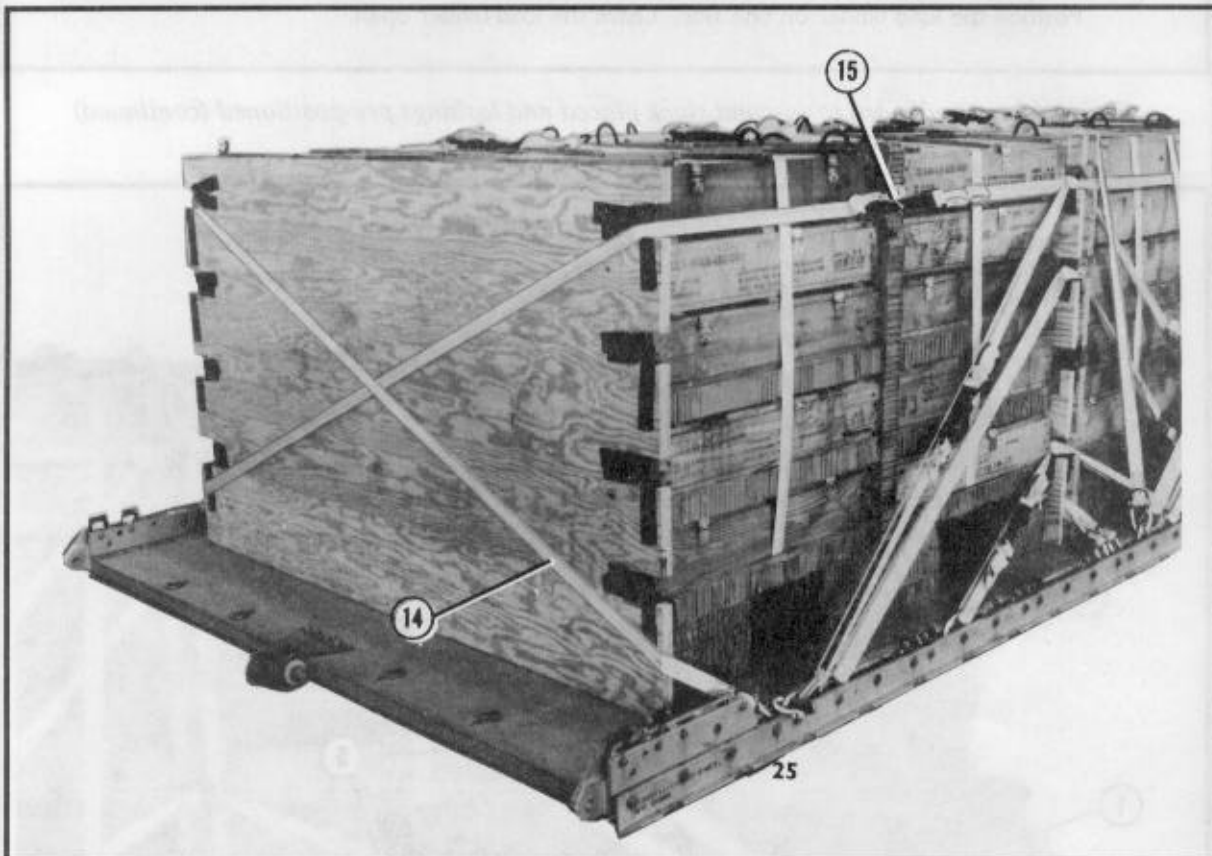
- ① Center the second honeycomb stack 17 1/2-inches from the rear edge of the platform.
- ② Position two 30-foot lashings over the honeycomb as shown in Figure 15-3, step 1.
- ③ Stack honeycomb and 70 ammunition boxes as shown for the first stack.
- ④ Secure the lashings placed in step 2 over the boxes.
- ⑤ Secure the load binders on the lashings placed in Figure 15-6, steps 4, 5, and 6.

Figure 15-7. Honeycomb, lashings, and ammunition placed for second stack

15-8. Installing Lashings on Second Ammunition Stack

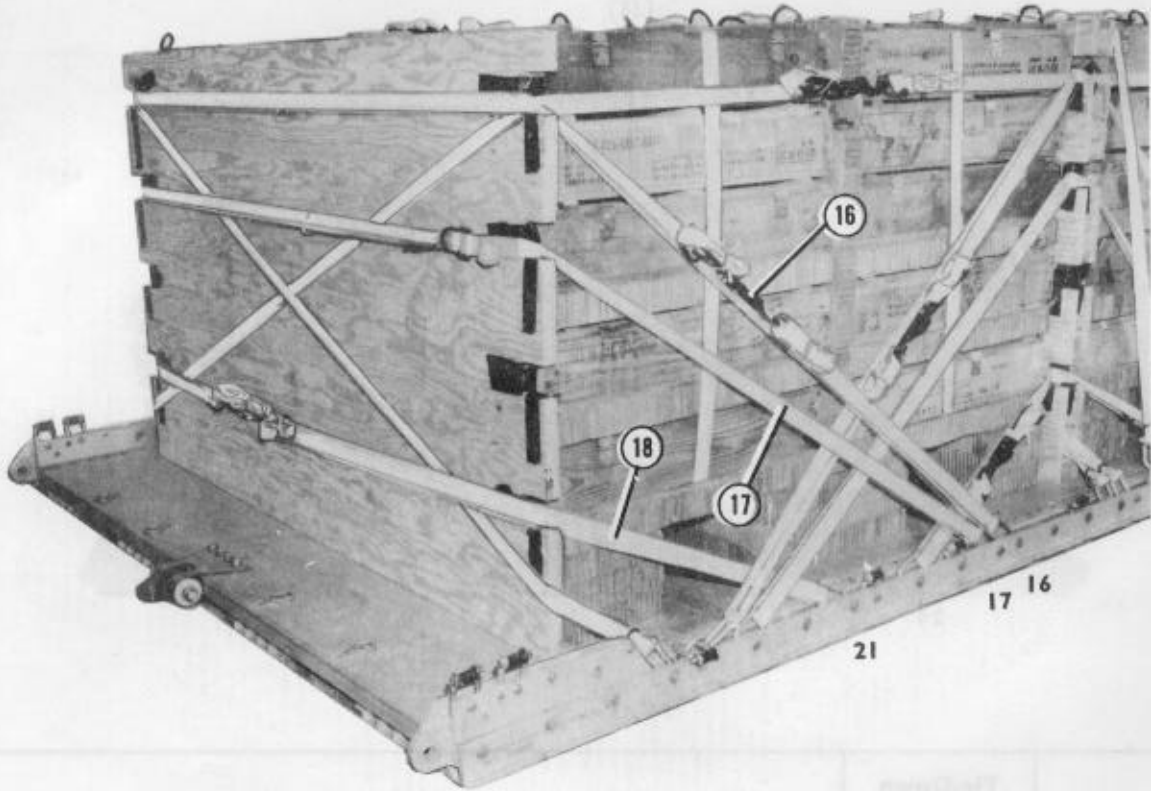
Place the fourth endboard and lash the second ammunition stack to the platform as shown in Figure 15-8. Be sure that the pre-positioned

lashings are taut and install additional lashings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-8.



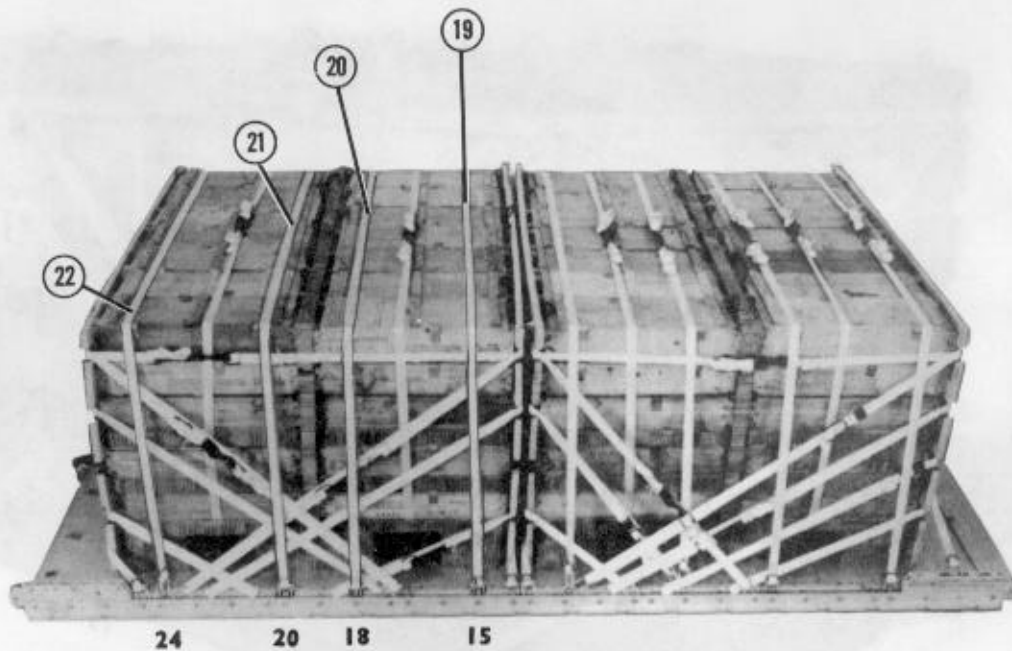
Lashing Number	Tie-Down Clevis Number	Instructions
14	14 and 25	Pass the pre-positioned lashing in Figure 15-6, step 2, around the left side of the stack. Pass a 15-foot lashing through clevis 25 and through its own D-ring. Pass the lashing through the top left cutout in the rear endboard. Secure the two lashings on the left side.
15	14A and 25A	Pass the pre-positioned lashing in Figure 15-6, step 3, around the right side of the stack. Pass a 15-foot lashing through clevis 25A and through its own D-ring. Pass the lashing through the top right cutout in the rear endboard. Secure the two lashings on the right side.

Figure 15-8. Lashings installed for second stack



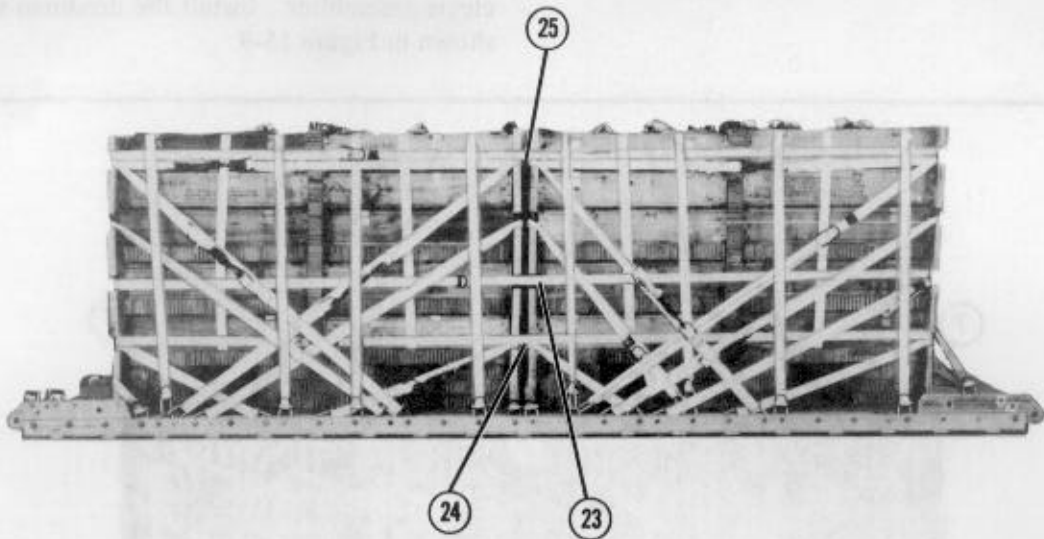
Lashing Number	Tie-Down Clevis Number	Instructions
16	16 and 16A	Pass a 45-foot lashing through both clevises and through the top cutouts in the rear endboard. Secure the lashing on the side.
17	17 and 17A	Pass a 45-foot lashing through both clevises and through the third cutouts from the bottom in the rear endboard. Secure the lashing on the side.
18	21 and 21A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the rear endboard. Secure the lashing at the rear.

Figure 15-8. Lashings installed for second stack (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
19	15 and 15A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass the lashing on the right over the load, and secure it to the left lashing on the side.
20	18 and 18A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass the lashing on the right over the load, and secure it to the left lashing on the side.
21	20 and 20A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass the lashing on the right over the load, and secure it to the left lashing on the side.
22	24 and 24A	Pass a 15-foot lashing through each clevis and through its own D-ring. Pass the lashing on the right over the load, and secure it to the left lashing on the side.

Figure 15-8. Lashings installed for second stack (continued)



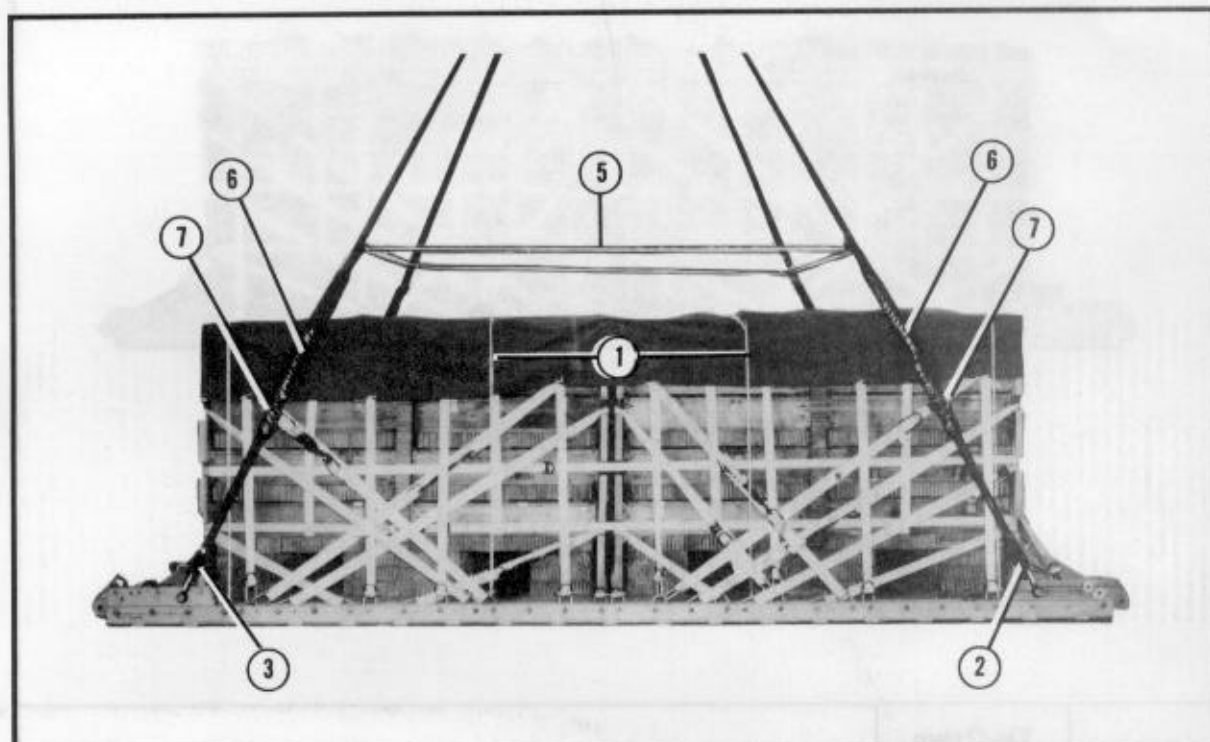
Lashing Number	Tie-Down Clevis Number	Instructions
23		Pass a 45-foot lashing around the load, through the second slots from the bottom of all four endboards.
24		Pass a 45-foot lashing around the load, through the bottom slots of all four endboards.
25		Pass a 45-foot lashing around the load, through the top slots of all four endboards.

Note: Secure the free ends of the lashings with two D-rings and a load binder.

Figure 15-8. Lashings installed for second stack (continued)

15-9. Installing Load Cover and Suspension Slings

Install the load cover as shown in Figure 15-9. Install the suspension slings as shown in Figure 15-9 using four 16-foot (4-loop), type XXVI nylon webbing slings and four large suspension clevis assemblies. Install the deadman's tie as shown in Figure 15-9.



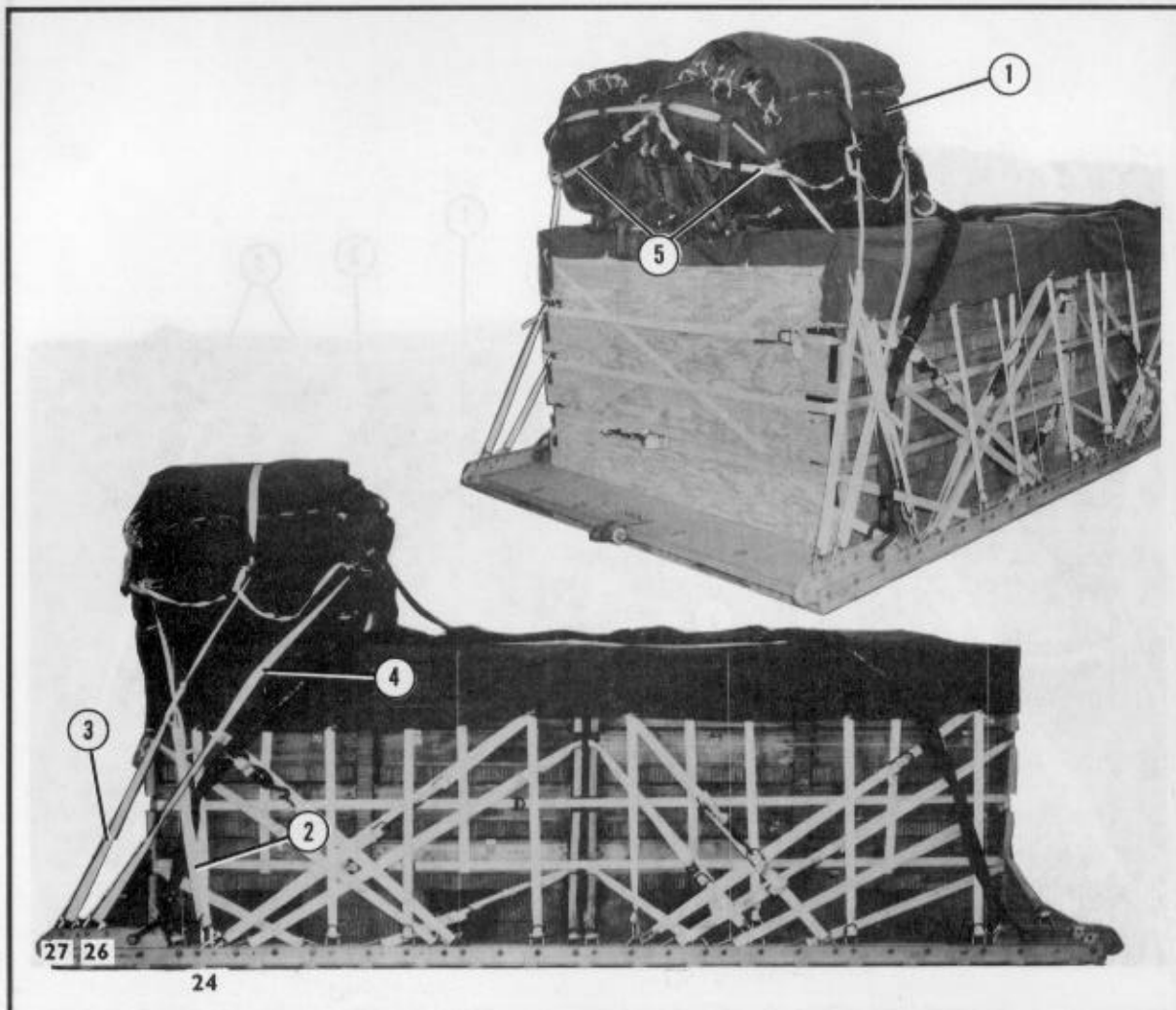
- ① Cover the load with an 8- by 15-foot piece of cotton duck cloth. Secure the cover to the load with type III nylon cord.
- ② Pass one end of a 16-foot suspension sling through the bell portion of a large suspension clevis. Bolt the clevis to the suspension hole of the right front tandem link.
- ③ Attach a suspension sling to the right rear tandem link as described in step 2.
- ④ Attach a suspension sling to each tandem link on the left rail as described above.
- ⑤ Make the deadman's tie according to FM 10-500-2/TO 13C7-1-5.
- ⑥ Pad the suspension slings with felt tied and taped in place 24 inches above the suspension clevises. Extend the tape 6 inches beyond the top and bottom of the felt.
- ⑦ Safety each suspension sling to an adjacent lashing with a length of type III nylon cord.

Figure 15-9. Load cover, suspension slings, and deadman's tie installed

15-10. Installing Parachutes

Compute parachute requirements for the load being rigged. Select the correct number of G-11B cargo parachutes. The load in Figure 15-10

shows four G-11B cargo parachutes. Install the parachutes as shown in Figure 15-10.

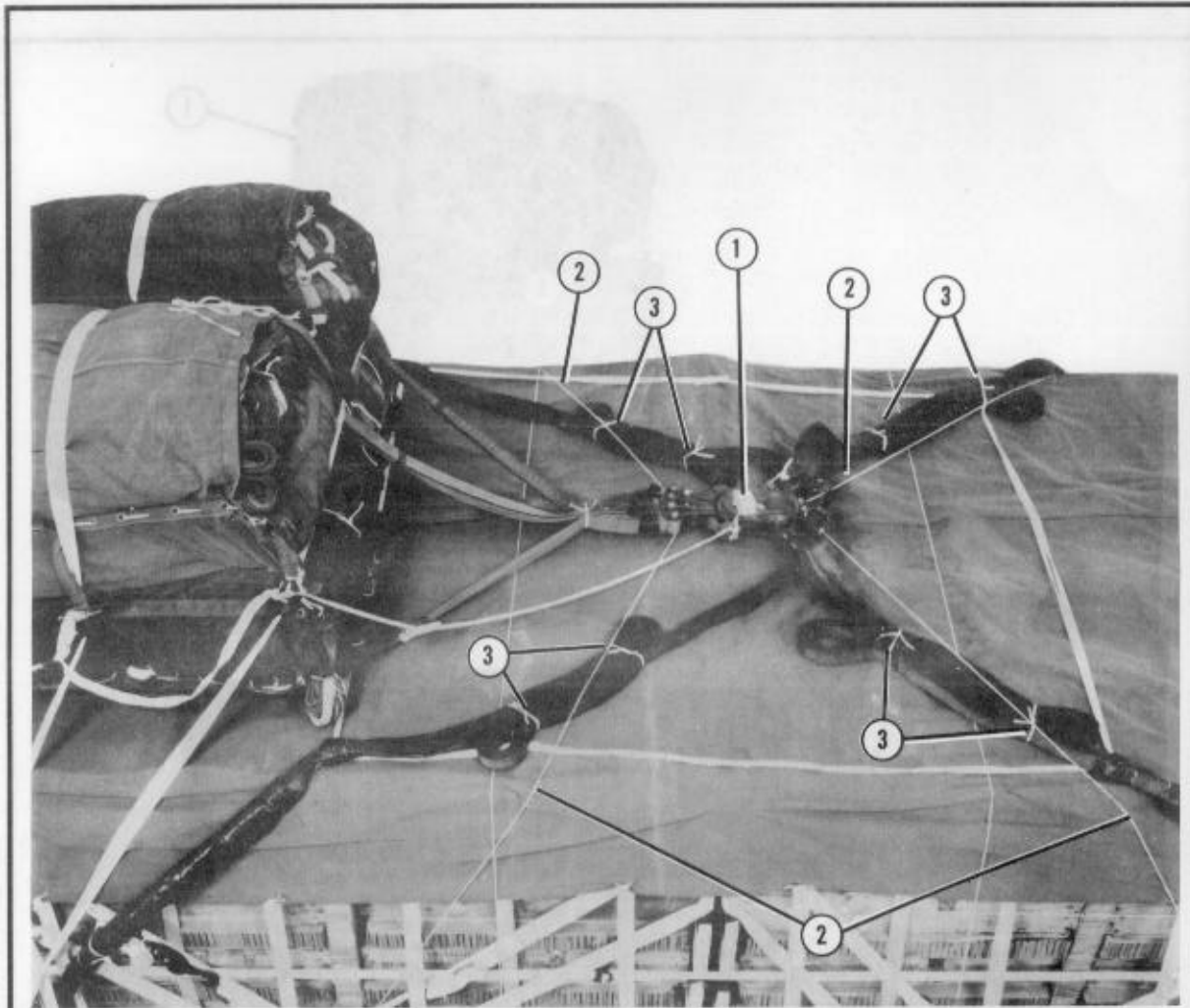


- ① Install four G-11B cargo parachutes on the rear of the load according to FM 10-500-2/TO 13C7-1-5.
- ② Install the rear parachute restraint to clevises 24 and 24A.
- ③ Install the center parachute restraint to clevises 27 and 27A.
- ④ Install the front parachute restraint to clevises 26 and 26A.
- ⑤ Install two parachute release straps according to FM 10-500-2/TO 13C7-1-5.

Figure 15-10. Four G-11B cargo parachutes installed

15-11. Installing Release System

Install and safety an M-2 cargo parachute release assembly as shown in Figure 15-11.

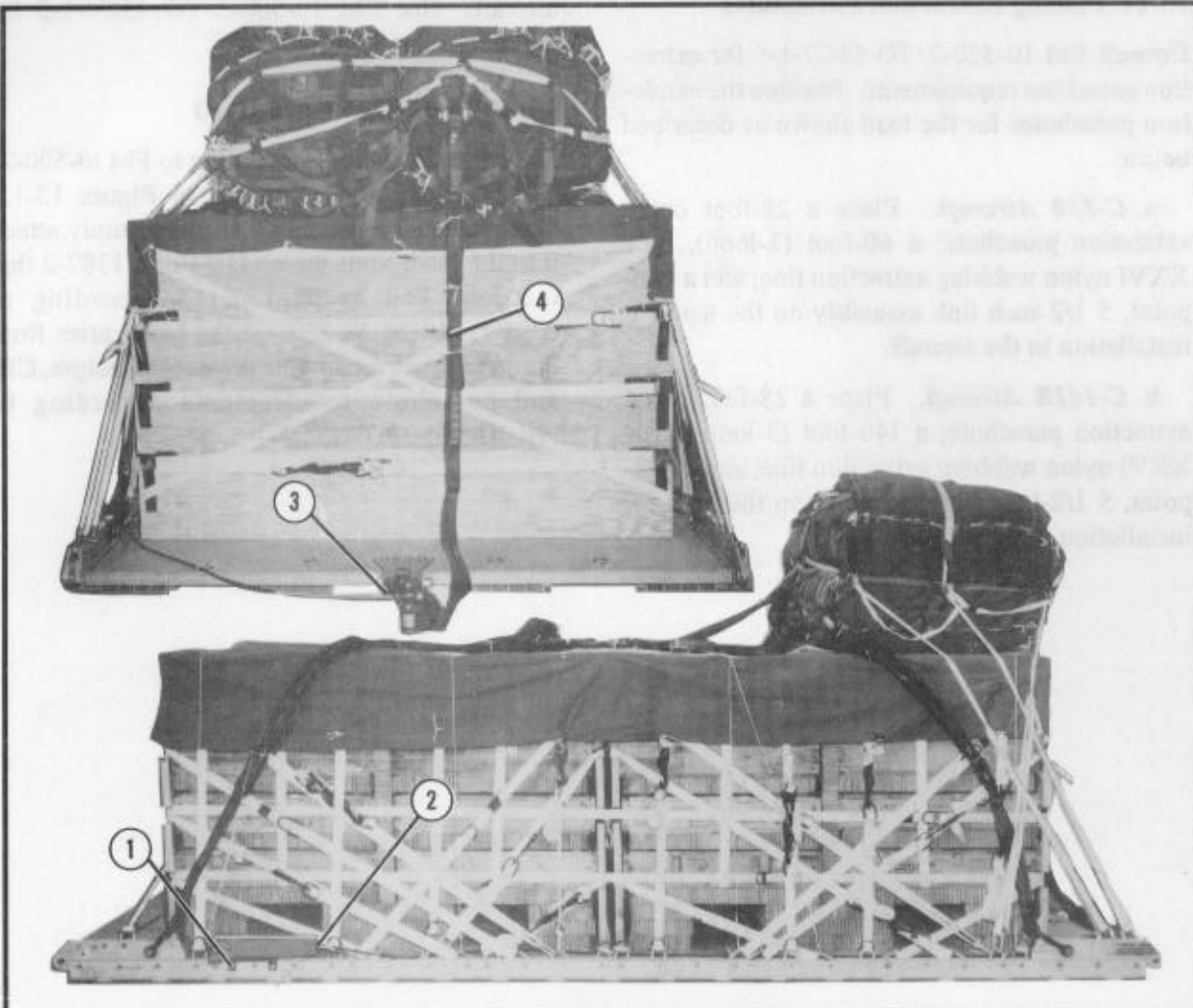


- ① Prepare and install an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Place the release assembly in front of the parachutes as shown.
- ② Safety the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie the slack in the suspension slings with type I, 1/4-inch cotton webbing.

Figure 15-11. Release assembly installed

15-12. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-12.



- ① Install the EFTA actuator brackets to the front mounting holes on the left platform rail.
- ② Attach a 16-foot release cable to the actuator. Install the actuator to the brackets and run the cable toward the rear.
- ③ Install the latch assembly to the extraction bracket. Attach the release cable to the latch assembly.
- ④ Install a 12-foot (2-loop), type XXVI nylon webbing sling as the deployment line. S-fold the slack and tie the folds with type I, 1/4-inch cotton webbing.

Figure 15-12. Extraction system installed

15-13. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints according to FM 10-500-2/TO 13C7-1-5.

15-14. Placing Extraction Parachutes

Consult FM 10-550-2/TO 13C7-1-5 for extraction parachute requirements. Position the extraction parachutes for the load shown 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-141B 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.

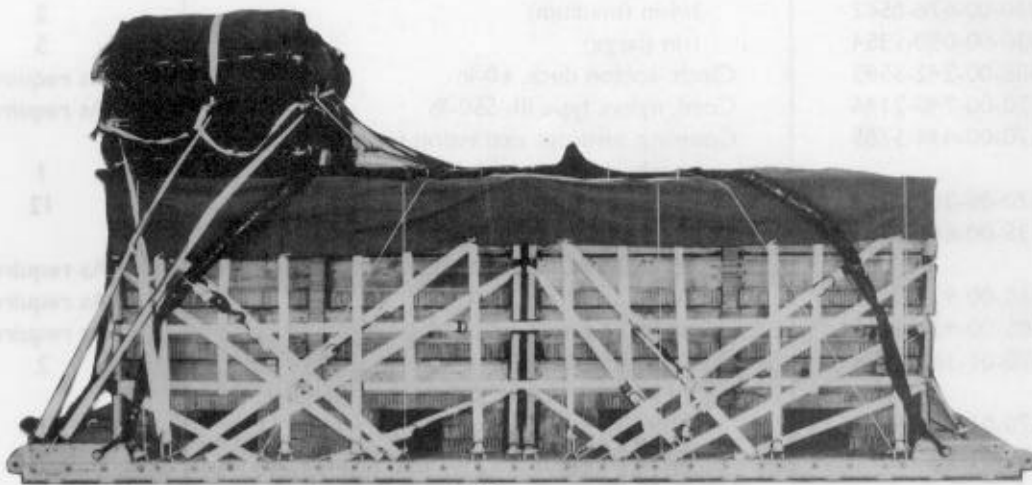
c. C-5 Aircraft. Place a 28-foot cargo extraction parachute and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

15-15. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-13. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load had been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, recompute the weight, height, CB, and parachute requirements according to FM 10-500-2/TO 13C7-1-5.

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:	Load shown	18,560 pounds
Height	.....	97 1/2 inches
Width	.....	108 inches
Length	.....	192 inches
Overhang: Front	.....	0 inches
Rear (parachute)	.....	0 inches
CB (from front edge of platform)	.....	106 inches
Extraction System (adds 18 inches to length of platform)	.....	EFTC

Figure 15-13. Supply load rigged on a 16-foot, type V platform for low-velocity airdrop

15-16. Equipment Required

Use the equipment listed in Table 15-1 to rig the load shown.

Table 15-1. Equipment required for rigging typical supply loads on a 16-foot type V platform for low-velocity airdrop

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)	5
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer w 16-ft cable	1
1670-00-360-0329	Cover, link assembly, type IV	12
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
8305-00-958-3685	Felt sheet, 1/2-in	As required
1670-01-183-2678	Leaf, extraction line	2
	* Line, extraction, type XXVI nylon webbing:	
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, 5 1/2-in:	1
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(2)
5310-00-232-5165	Nut, 1-in	(2)
1670-00-003-1954	Plate, side, 5 1/2-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV	12
5315-00-010-4657	Nail, steel wire, common, 6d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	20 1/2 sheets
	87- by 10-in	(2)
	87- by 12-in	(12)
	87- by 24-in	(6)
	87- by 36-in	(14)
1670-01-016-7841	Parachute, cargo, G-11B	4
	Parachute, cargo extraction:	
1670-01-063-3715	15-ft	1
1670-00-040-8135	28-ft	1

* Both extraction lines may be needed for C-5 aircraft.

Table 15-1. Equipment required for rigging typical supply loads on a 16-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
	Platform, AD, type V, 16-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis assembly (type V)	(60)
1670-01-162-2381	Tandem link (multipurpose)	(4)
5530-00-128-4981	Plywood, 3/4-in:	10 sheets
	90- by 7-in	8
	90- by 48-in	8
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 suspension:	
1670-00-432-2507	16-ft (4-loop)	4
	For riser extension:	
1670-01-062-6302	20-ft (2-loop)	12
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, PSA, cloth back, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	76
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
	Tubular:	
8305-00-082-5752	1/2-in, natural	As required
8305-00-263-3591	Type VIII	As required

Section II
RIGGING 155-MILLIMETER AMMUNITION

15-17. Description of Load

Ninety-six 155-millimeter projectiles and 72 powder canisters are rigged for low-velocity airdrop on a 16-foot, type V airdrop platform. All 155-millimeter ammunition packaged as shown and listed in FM 10-500-53/TO 13C7-18-41, as certified for airdrop, may be rigged using these procedures. This load uses three G-11B cargo parachutes.

15-18. Preparing Platform

Prepare a 16-foot, type V airdrop platform as described below.

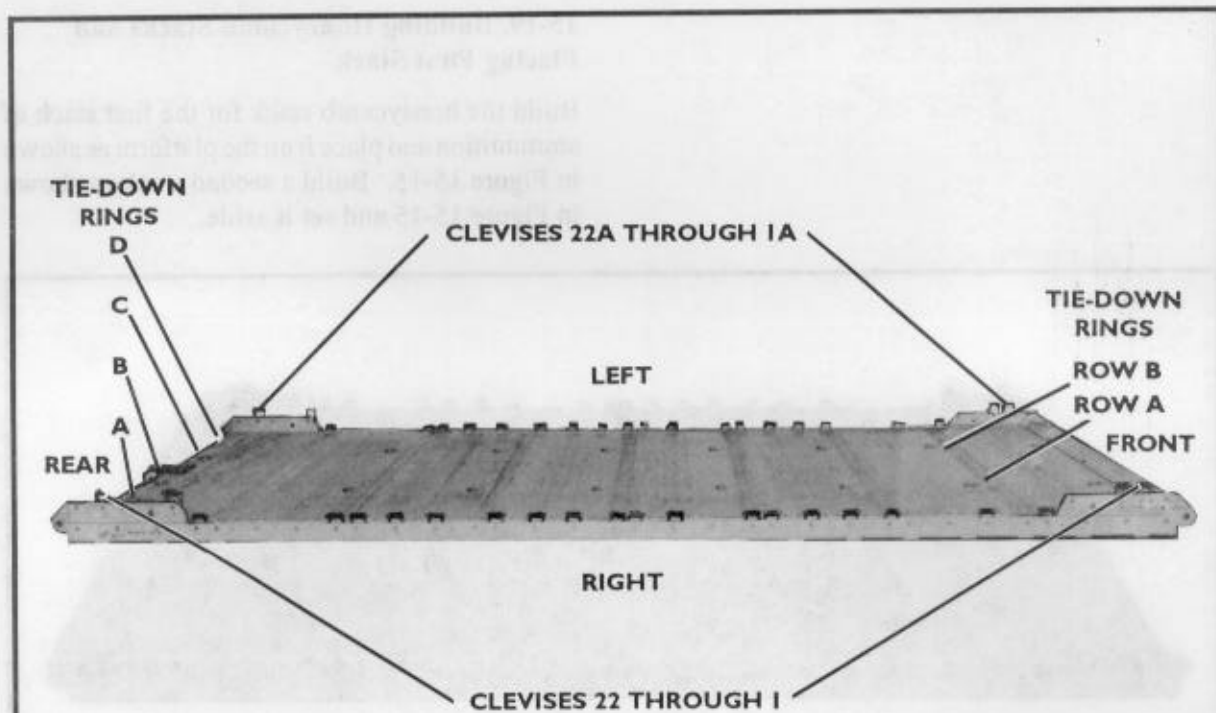
a. Inspecting Platform. Inspect, or assemble and inspect, the 16-foot, type V airdrop platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.

b. Installing Tandem Links. Install tandem links on the front and rear of each rail as shown in Figure 15-14.

c. Installing and Numbering Clevises. Bolt and number 44 clevis assemblies as shown in Figure 15-14.

Notes:

1. The nose bumper may or may not be installed.
2. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.



Item	Material	Length (Inches)	Width (Inches)	Quantity	Notes
1	Hardware	36	36	2	Use 3/4 inch diameter bolts
2	Hardware	36	36	2	Use 3/4 inch diameter bolts

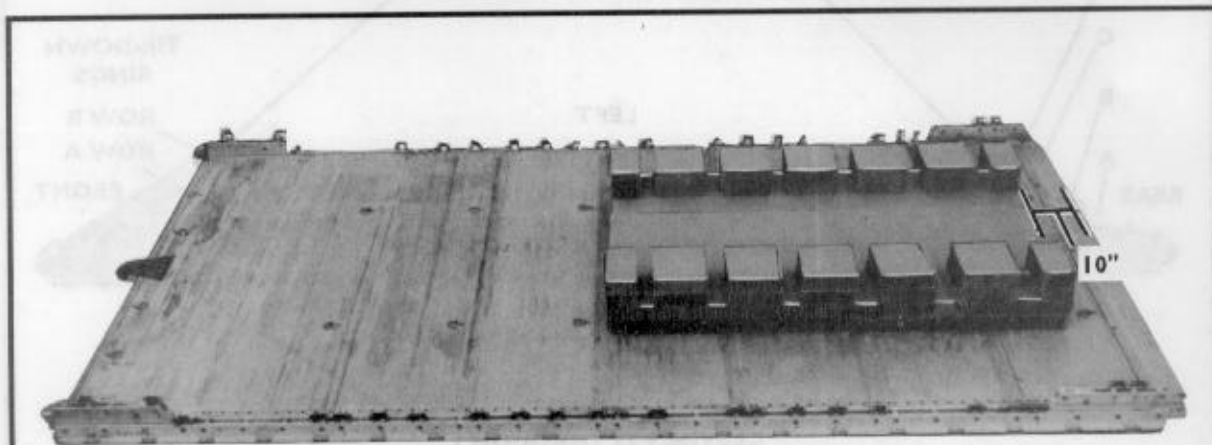
Step:

1. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
2. Install a tandem link on the rear of each platform side rail using holes 30, 31, and 32.
3. Install clevises on bushings 2 and 3 of each front tandem link.
4. Install clevises on bushings 1 and 3 of each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 4, 6, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, and 29.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 22, and those bolted to the left side from 1A through 22A.
7. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

Figure 15-14. Platform prepared

15-19. Building Honeycomb Stacks and Placing First Stack

Build the honeycomb stack for the first stack of ammunition and place it on the platform as shown in Figure 15-15. Build a second stack as shown in Figure 15-15 and set it aside.

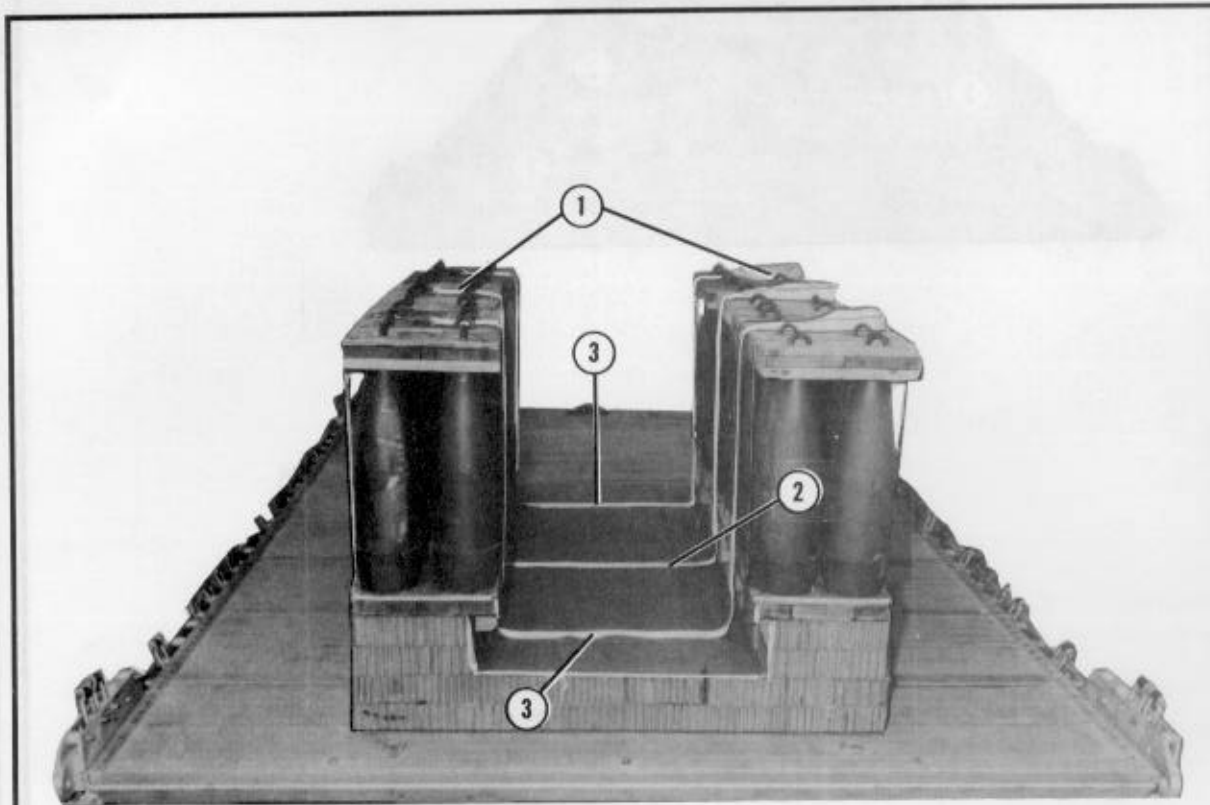


Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions	
1 and 2	2	36	84	Honeycomb	Form a two-layer base 84 inches long and 54 inches wide, alternating the layers of honeycomb. Center the stack 10 inches from the front edge of the platform.	
	2	18	84	Honeycomb		
	8	12	5	Honeycomb		Place two pieces of honeycomb on each corner of the base with the 5-inch sides facing the left and right sides of the platform.
	4	12	10	Honeycomb		Center two pieces of honeycomb along each side of the base with the 10-inch sides facing the left and right sides of the platform.
	16	12	10	Honeycomb	Evenly space two-layer pieces of honeycomb between the center and corner pieces. The spaces between the pieces are 4 inches.	

Figure 15-15. Honeycomb for first ammunition stack prepared and placed

15-20. Positioning and Securing First Ammunition Stack

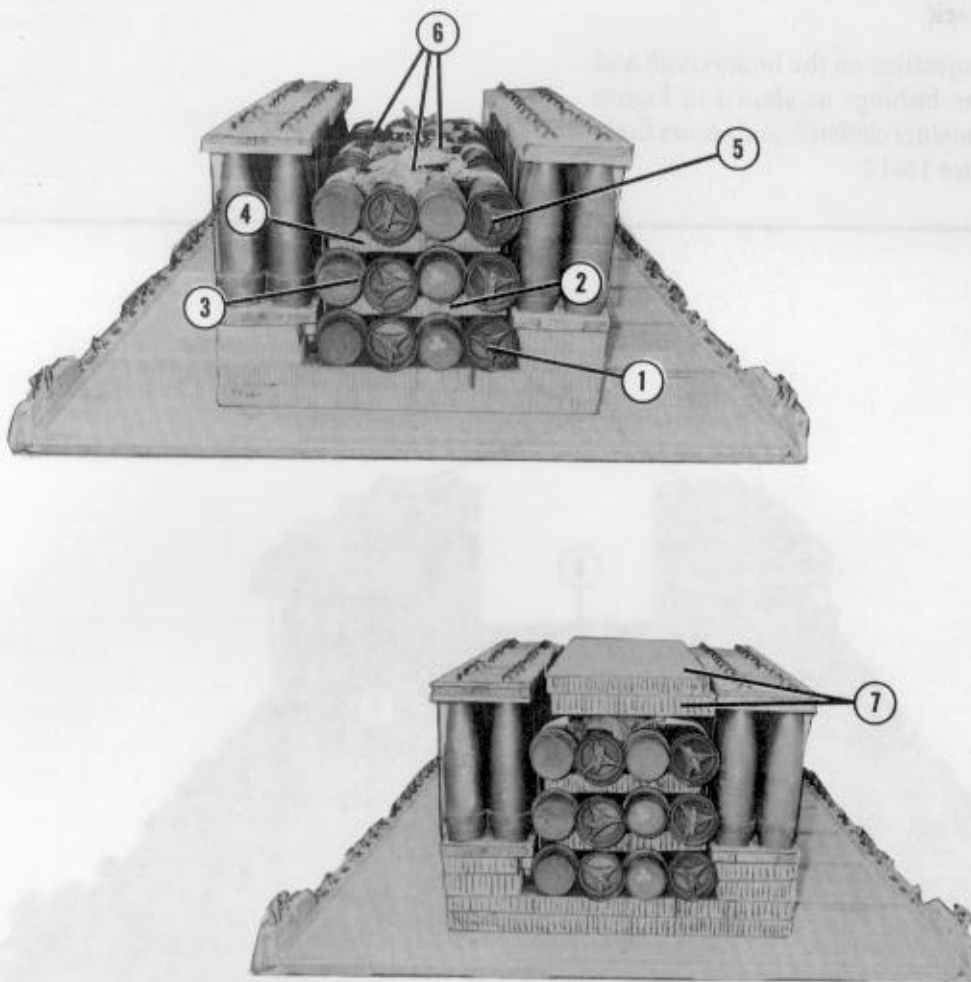
Set six sets of projectiles on the honeycomb and pre-position three lashings as shown in Figure 15-16. Stow 36 powder canisters and secure them as shown in Figure 15-17.



- ① Center four powder canisters on each of the pre-positioned lashings in Figure 15-18, steps 3 and 4. Adjust the ends of the canisters as shown.
- ② Place a 24-by-24-inch piece of honeycomb over each group of four canisters.
- ③ Place a second layer of 12 canisters over the honeycomb placed in step 2.
- ④ Place a second layer of three 24-by-24-inch pieces of honeycomb over the second layer of

- ① Set three bundles of projectiles flush on the honeycomb on each side. Fit the skids at the bottom of the bundles into the slots in the honeycomb stack.
- ② Center a 15-foot lashing on the base layer of honeycomb from left to right.
- ③ Place a 15-foot lashing 14 inches from each end of the stack in a left-to-right direction.

Figure 15-16. Projectiles placed on honeycomb and lashings pre-positioned



- ① Center four powder canisters on each of the pre-positioned lashings in Figure 15-16, steps 2 and 3. Alternate the ends of the canisters as shown.
- ② Place a 24- by 24-inch piece of honeycomb over each group of four canisters.
- ③ Place a second layer of 12 canisters over the honeycomb placed in step 2.
- ④ Place a second layer of three 24- by 24-inch pieces of honeycomb over the second layer of canisters.
- ⑤ Place a third layer of 12 canisters over the honeycomb placed in step 4.
- ⑥ Secure the three pre-positioned lashings over the canisters. Pad between the load binders and canisters with cellulose wadding.
- ⑦ Center two 28- by 84-inch pieces of honeycomb over the canisters.

Figure 15-17. Canisters stowed and secured

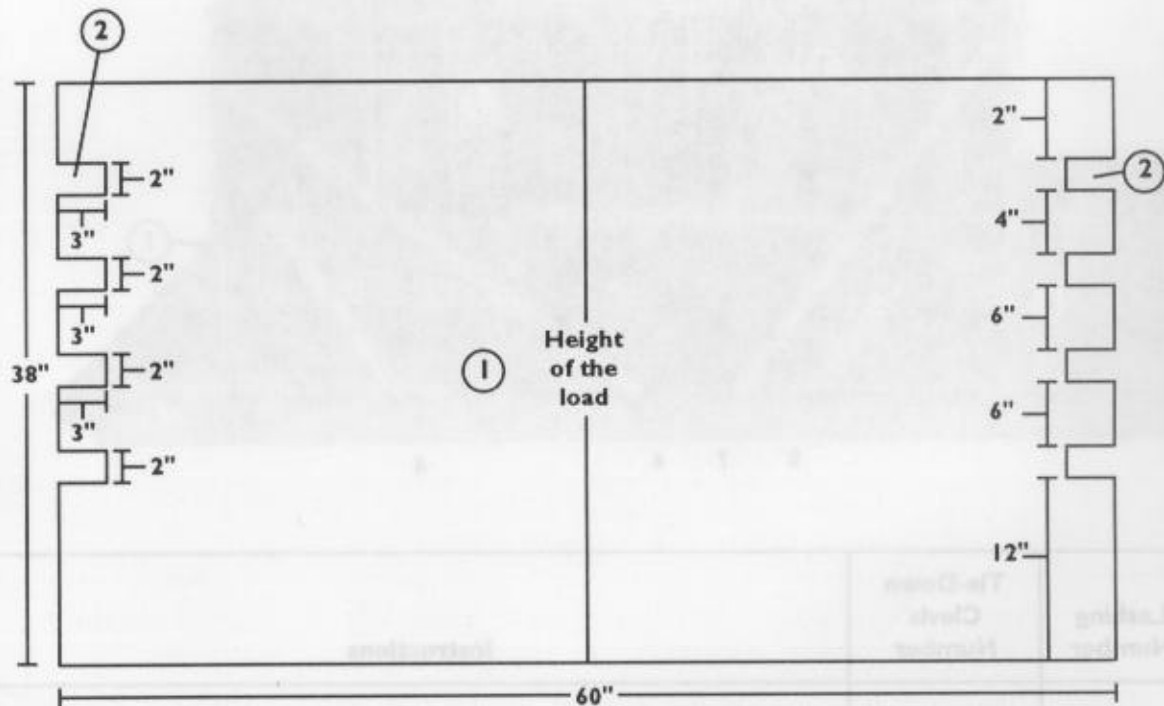
15-21. Constructing Endboards

Construct four endboards as shown in Figure 15-18.

CAUTION

The endboards must be the same height as the ends of the load.

Note: This drawing is not drawn to scale.

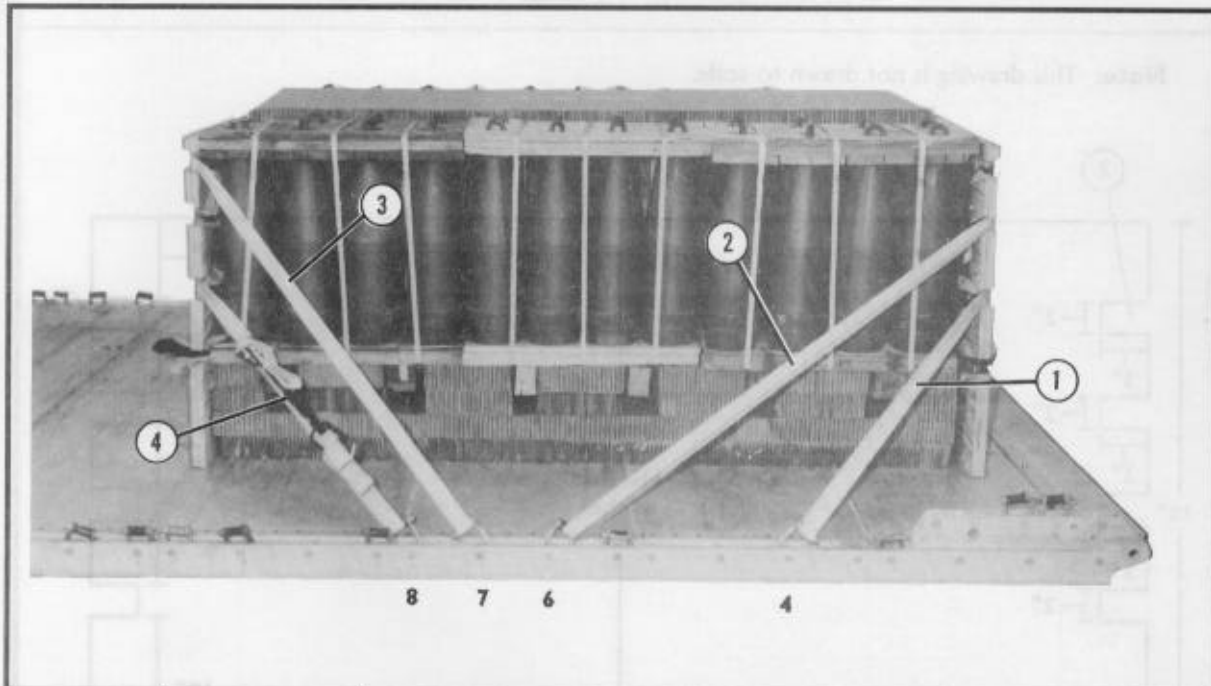


- ① Cut eight 3/4- by 60- by 38-inch pieces of plywood.
- ② Make 2- by 3-inch cutouts as shown.
- ③ Nail two pieces of plywood flush together with 6d nails to make four endboards. Pad the cutouts with cellulose wadding and tape (not shown).

Figure 15-18. Endboards for 155-millimeter ammunition constructed

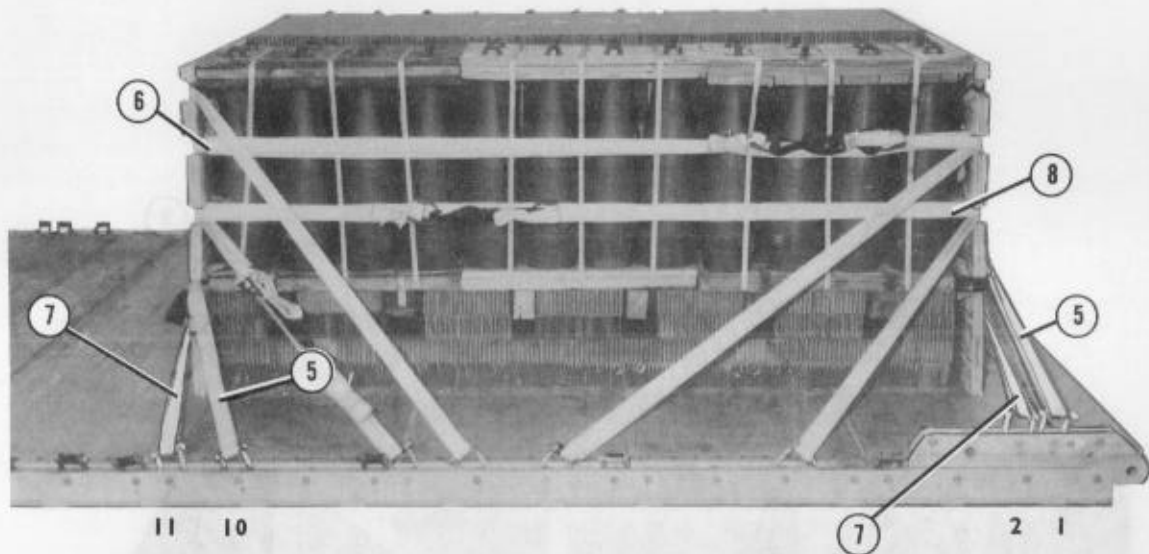
15-22. Lashing First Ammunition Stack and First and Second Endboards

Lash the load to the platform according to FM 10-500-2/TO 13C7-1-5 and as shown in Figures 15-19 and 15-20. Set an endboard against each end of the first ammunition stack. Lash the first and second endboards and the first ammunition stack to the platform as shown in Figure 15-19.



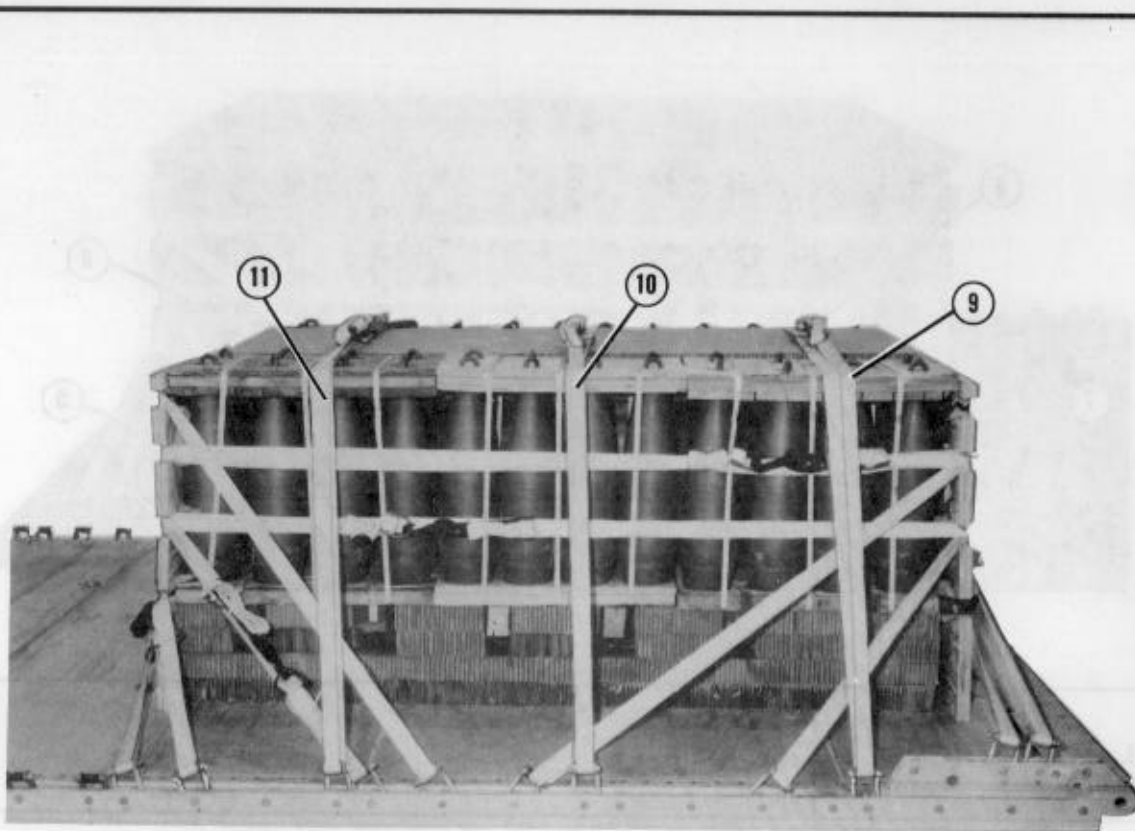
Lashing Number	Tie-Down Clevis Number	Instructions
1	4 and 4A	Pass a 30-foot lashing through both clevises and through the third cutouts from the top in the first endboard. Secure the lashing in front.
2	6 and 6A	Pass a 30-foot lashing through both clevises and through the second cutouts from the top in the first endboard. Secure the lashing in front.
3	7 and 7A	Pass a 30-foot lashing through both clevises and through the top cutouts in the second endboard. Secure the lashing on the left side.
4	8 and 8A	Pass a 30-foot lashing through both clevises and through the third cutouts from the top in the second endboard. Secure the lashing on the right side.

Figure 15-19. Lashings installed for first stack



Lashing Number	Tie-Down Clevis Number	Instructions
5	1 and 10	Pass a 30-foot lashing through clevis 1, through the second cutout from the top in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the second cutout from the top in the left side of the second endboard and through clevis 10. Secure the lashing on the left side.
6	1A and 10A	Pass a 30-foot lashing through clevis 1A, through the second cutout from the top in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the second cutout from the top in the right side of the second endboard and through clevis 10A. Secure the lashing on the right side.
7	2 and 11	Pass a 30-foot lashing through clevis 2, through the third cutout from the top in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the third cutout from the top in the left side of the second endboard, and through clevis 11. Secure the lashing on the left side.
8	2A and 11A	Pass a 30-foot lashing through clevis 2A, through the third cutout from the top in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the third cutout from the top in the right side of the second endboard, and through clevis 11A. Secure the lashing on the right side.

Figure 15-19. Lashings installed for first stack (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
9	3 and 3A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.
10	5 and 5A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.
11	9 and 9A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.

Figure 15-19. Lashings installed for first stack (continued)

15-23. Positioning Second Ammunition Stack and Third and Fourth Endboards

Position and secure the second ammunition stack and its endboards as described below.

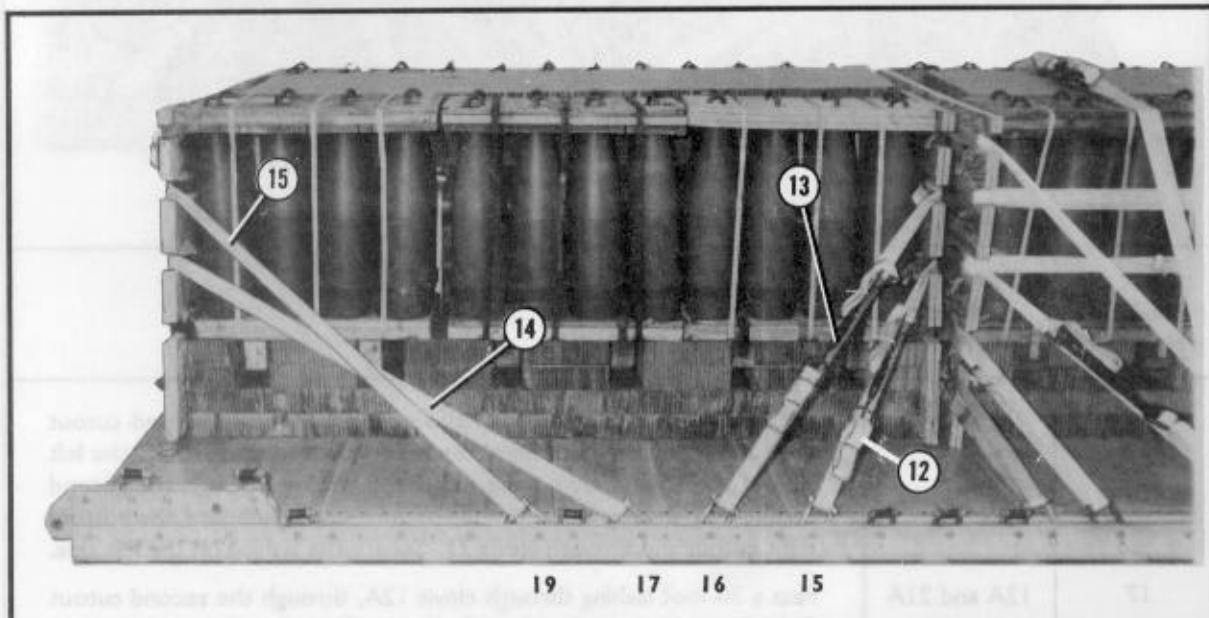
a. Center the honeycomb for the second ammunition stack 6 inches from the rear edge of the platform.

b. Stow and secure six sets of projectiles and 36 powder canisters on the honeycomb as shown in Figures 15-16 and 15-17.

c. Set an endboard against each end of the second ammunition stack.

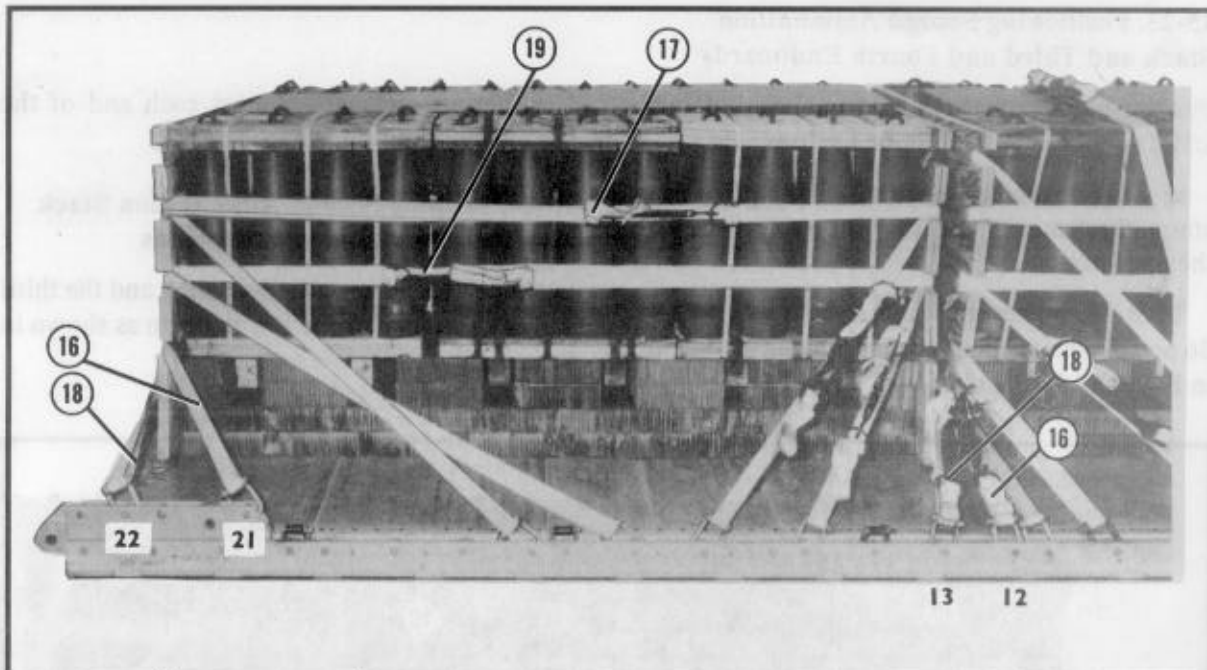
15-24. Lashing Second Ammunition Stack and Third and Fourth Endboards

Lash the second ammunition stack and the third and fourth endboards to the platform as shown in Figure 15-20.



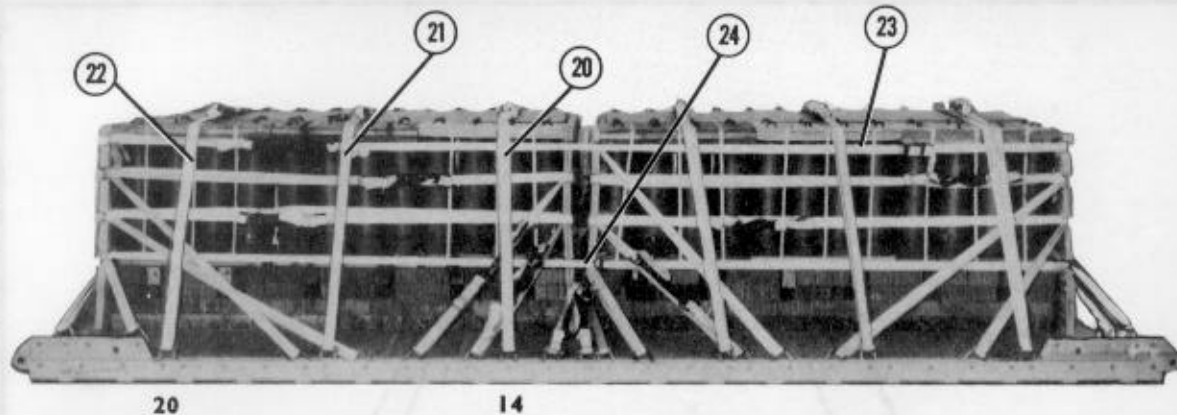
Lashing Number	Tie-Down Clevis Number	Instructions
12	15 and 15A	Pass a 30-foot lashing through both clevises and through the third cutouts from the top in the third endboard. Secure the lashing on the side.
13	16 and 16A	Pass a 30-foot lashing through both clevises and through the second cutouts from the top in the third endboard. Secure the lashing on the side.
14	17 and 17A	Pass a 30-foot lashing through both clevises and through the third cutouts from the top in the fourth endboard. Secure the lashing at the rear.
15	19 and 19A	Pass a 30-foot lashing through both clevises and through the second cutouts from the top in the fourth endboard. Secure the lashing at the rear.

Figure 15-20. Lashings installed for second stack



Lashing Number	Tie-Down Clevis Number	Instructions
16	12 and 21	Pass a 30-foot lashing through clevis 12, through the second cutout from the top in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the second cutout from the top in the left side of the second endboard, the bottom right cutout and through clevis 21. Secure the lashing on the left side.
17	12A and 21A	Pass a 30-foot lashing through clevis 12A, through the second cutout from the top in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the second cutout from the top in the right side of the second endboard, and through clevis 21A. Secure the lashing on the right side.
18	13 and 22	Pass a 30-foot lashing through clevis 13, through the third cutout from the top in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the third cutout from the top in the left side of the second endboard and through clevis 22. Secure the lashing on the left side.
19	13A and 22A	Pass a 30-foot lashing through clevis 13A, through the third cutout from the top in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the third cutout from the top in the right side of the second endboard and through clevis 22A. Secure the lashing on the right side.

Figure 15-20. Lashings installed for second stack (continued)

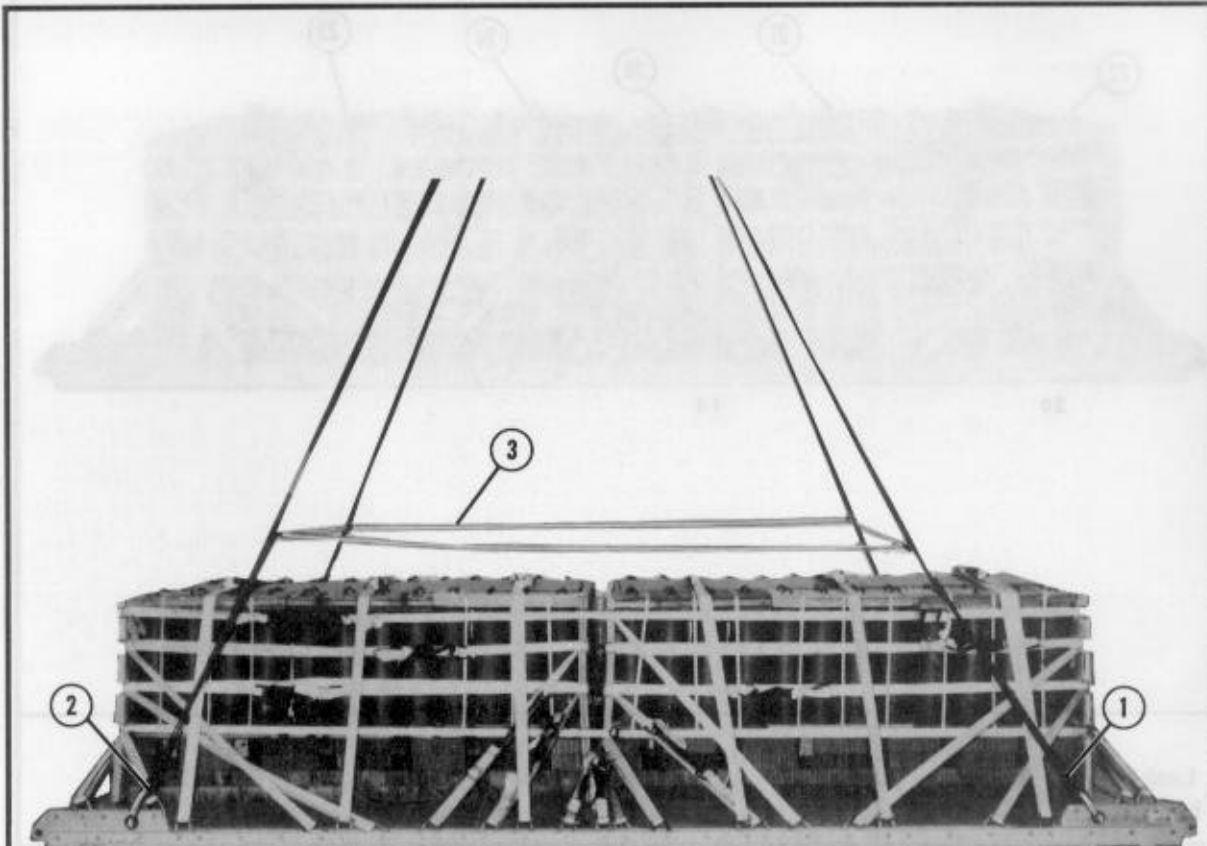


Lashing Number	Tie-Down Clevis Number	Instructions
20	14 and 14A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.
21	18 and 18A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.
22	20 and 20A	Pass a 30-foot lashing through both clevises and over the top of the load. Secure the lashing on top.
23		Pass a 45-foot lashing around the entire load through the top cutouts in all four endboards. Secure the lashing on the side.
24		Pass a 45-foot lashing around the entire load through the bottom cutouts in all four endboards. Secure the lashing on the side.

Figure 15-20. Lashings installed for second stack (continued)

15-25. Installing Suspension Slings

Install the suspension slings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-21 using four 16-foot (2-loop), type XXVI nylon webbing slings. Install the deadman's tie as shown in Figure 15-21.

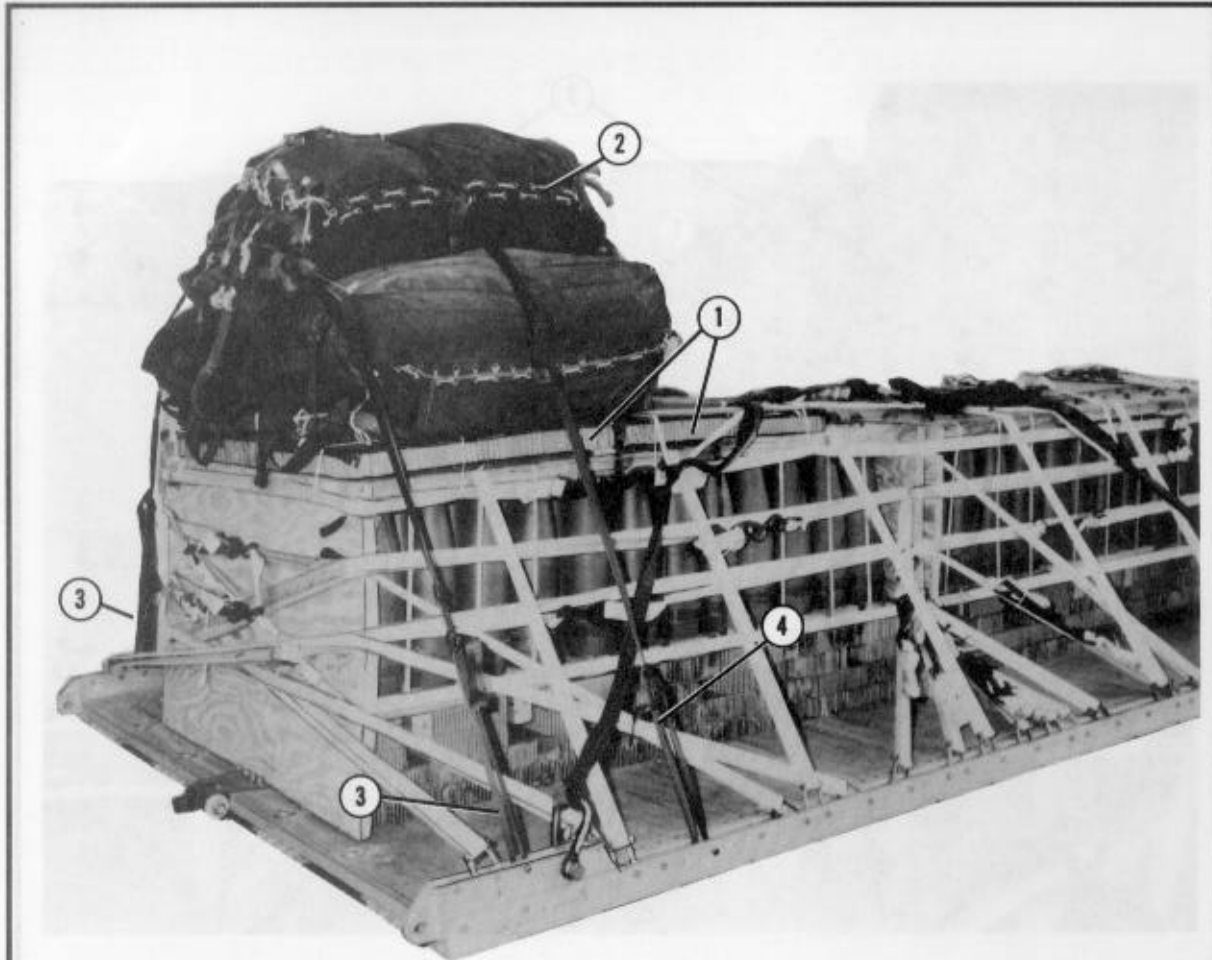


- ① Pass one end of a 16-foot suspension sling through the bell portion of a large suspension clevis. Bolt the clevis to the suspension hole of the right front tandem link.
- ② Install a 16-foot sling onto each tandem link in the same way.
- ③ Raise all four suspension slings. Make the deadman's tie according to FM 10-500-2/TO 13C7-1-5.

Figure 15-21. Suspension slings and deadman's tie installed

15-26. Installing Parachutes

Install and restrain three G-11B cargo parachutes as shown in Figure 15-22 and according to FM 10-500-2/TO 13C7-1-5.

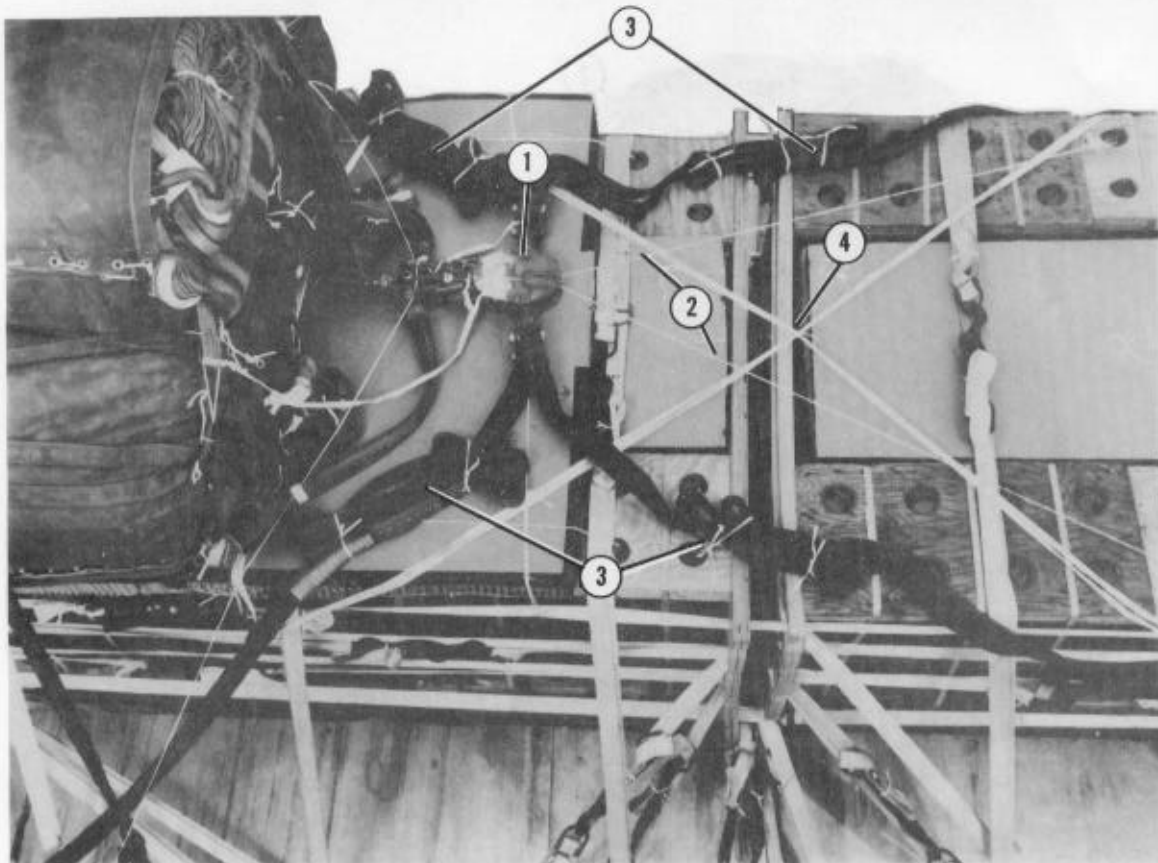


- ① Lay two 27- by 75-inch pieces of honeycomb side-by-side and flush with the rear edge of the ammunition stack. Tape the edges of the honeycomb and tie it to the load with type III nylon cord.
- ② Install three G-11B cargo parachutes on the honeycomb placed in step 1.
- ③ Install the rear parachute restraint to the second bushings on the rear tandem links.
- ④ Install the front parachute restraint to bushings 27 and 27A.

Figure 15-22. G-11B cargo parachutes installed

15-27. Installing Release System

Install and safety an M-1 cargo parachute release assembly as shown in Figure 15-23.

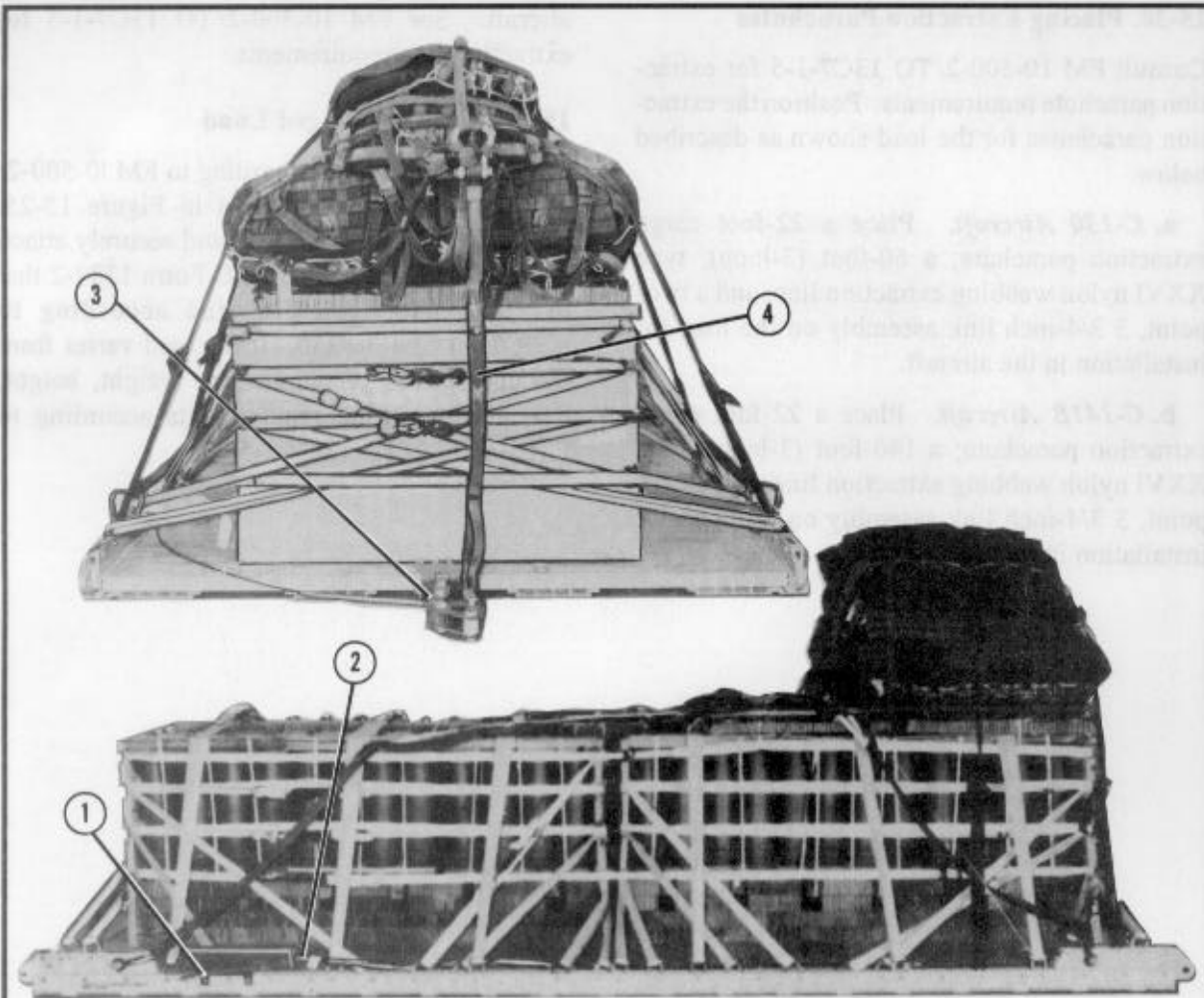


- ① Prepare and install an M-1 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Place the release assembly on the honeycomb in front of the parachutes as shown.
- ② Safety the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie the slack in the suspension slings with type I, 1/4-inch cotton webbing.
- ④ Tie the two side sections of the deadman's tie together in the center with a length of type I, 1/4-inch cotton webbing.

Figure 15-23. Release assembly installed

15-28. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-24.



- ① Install the EFTA actuator brackets to the front mounting holes on the left platform side rail.
- ② Attach a 16-foot release cable to the actuator. Install the actuator to the brackets and run the cable toward the rear.
- ③ Install the latch assembly to the extraction bracket. Attach the release cable to the latch assembly.
- ④ Install a 9-foot (2-loop), type XXVI nylon webbing sling as the deployment line. S-fold the slack and tie the folds with type I, 1/4-inch cotton webbing.

Figure 15-24. Extraction system installed

**15-29. Installing Provisions for
Emergency Restraints**

Install provisions for emergency restraints according to FM 10-500-2/TO 13C7-1-5.

15-30. Placing Extraction Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for extraction parachute requirements. Position the extraction parachutes for the load shown as described below.

a. C-130 Aircraft. Place a 22-foot cargo extraction parachute; a 60-foot (3-loop), type XXVI nylon webbing extraction line; and a two-point, 3 3/4-inch link assembly on the load for installation in the aircraft.

b. C-141B Aircraft. Place a 22-foot cargo extraction parachute; a 140-foot (3-loop), type XXVI nylon webbing extraction line; and a two-point, 3 3/4-inch link assembly on the load for installation in the aircraft.

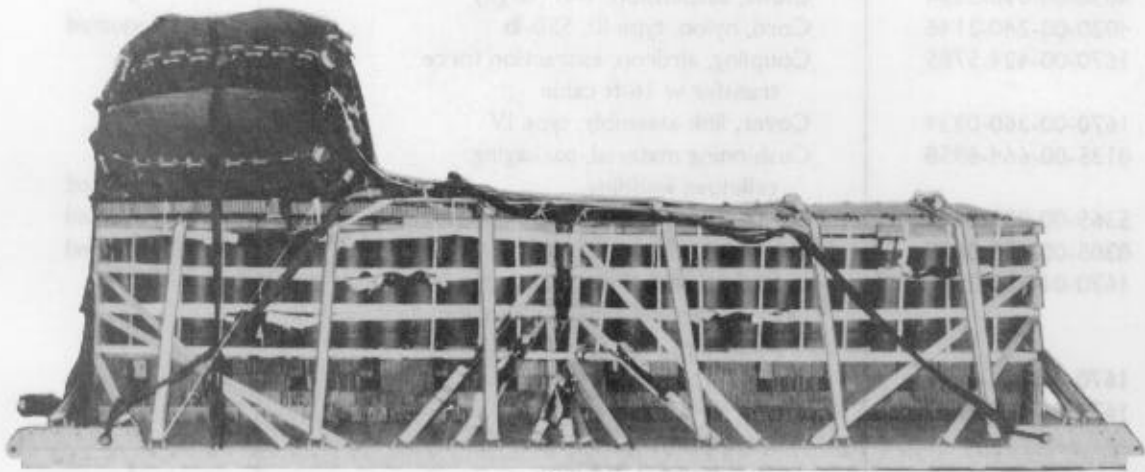
c. C-5 Aircraft. Place a 22-foot cargo extraction parachute and a two-point, 3 3/4-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

15-31. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-25. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load had been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, recompute the weight, height, CB, and parachute requirements according to FM 10-500-2/TO 13C7-1-5.

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:	Load shown.....	13,300 pounds
Height	.....	86 inches
Width	.....	108 inches
Length	.....	192 inches
Overhang: Front	.....	0 inches
Rear	.....	0 inches
CB (from front edge of platform)	.....	101 inches
Extraction System (adds 18 inches to length of platform)	.....	EFTC

Figure 15-25. 155-millimeter ammunition rigged on a 16-foot, type V platform for low-velocity airdrop

15-32. Equipment Required

Use the equipment listed in Table 15-2 to rig the load shown.

Table 15-2. Equipment required for rigging 155-millimeter ammunition on a 16-foot type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
4030-00-090-5354	Clevis, suspension, 1-in (large)	5
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer w 16-ft cable	1
1670-00-360-0329	Cover, link assembly, type IV	9
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
8305-00-958-3685	Felt sheet, 1/2-in	As required
1670-01-183-2678	Leaf, extraction line	2
	* Line, extraction, type XXVI nylon webbing:	
1670-01-062-6313	60-ft (3-loop) or	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	(2)
1670-00-003-1953	Plate, side, 3 3/4-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV	9
5315-00-010-4657	Nail, steel wire, common, 6d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	12 1/2 sheets
	12- by 5-in	16
	12- by 10-in	40
	18- by 84-in	4
	27- by 75-in	2
	28- by 84-in	4
	36- by 84-in	4
1670-01-016-7841	Parachute, cargo, G-11B	3
	Parachute, cargo extraction:	
1670-01-063-3715	15-ft	1
1670-01-063-3716	22-ft	1

*Both extraction lines may be needed for C-5 aircraft.

Table 15-2. Equipment required for rigging 155-millimeter ammunition on a 16-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
	Platform, AD, type V, 16-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis assembly (type V)	(44)
1670-01-162-2381	Tandem link (multipurpose)	(4)
5530-00-128-4981	Plywood, 3/4-in:	8 sheets
	60- by 38-in	8
1670-01-097-8816	Release, cargo parachute, M-1	1
	Sling, cargo airdrop, type XXVI nylon webbing:	
	For deployment line:	
1670-01-062-6304	9-ft (2-loop)	1
	For suspension:	
1670-01-063-7761	16-ft (2-loop)	4
	For riser extension:	
1670-01-062-6302	20-ft (2-loop)	9
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, PSA, cloth back, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	56
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in, natural	As required
8305-00-263-3591	Type VIII	As required

Section III
RIGGING 20-MILLIMETER AMMUNITION

15-33. Description of Load

Two hundred and forty boxes of 20-millimeter ammunition are rigged for low-velocity airdrop on a 16-foot, type V airdrop platform. All 20-millimeter ammunition packaged as shown and listed in FM 10-500-53/TO 13C7-18-41, as certified for low-velocity airdrop, may be rigged using these procedures. This load uses five G-11B cargo parachutes.

15-34. Preparing Platform

Prepare a 16-foot, type V airdrop platform as described below.

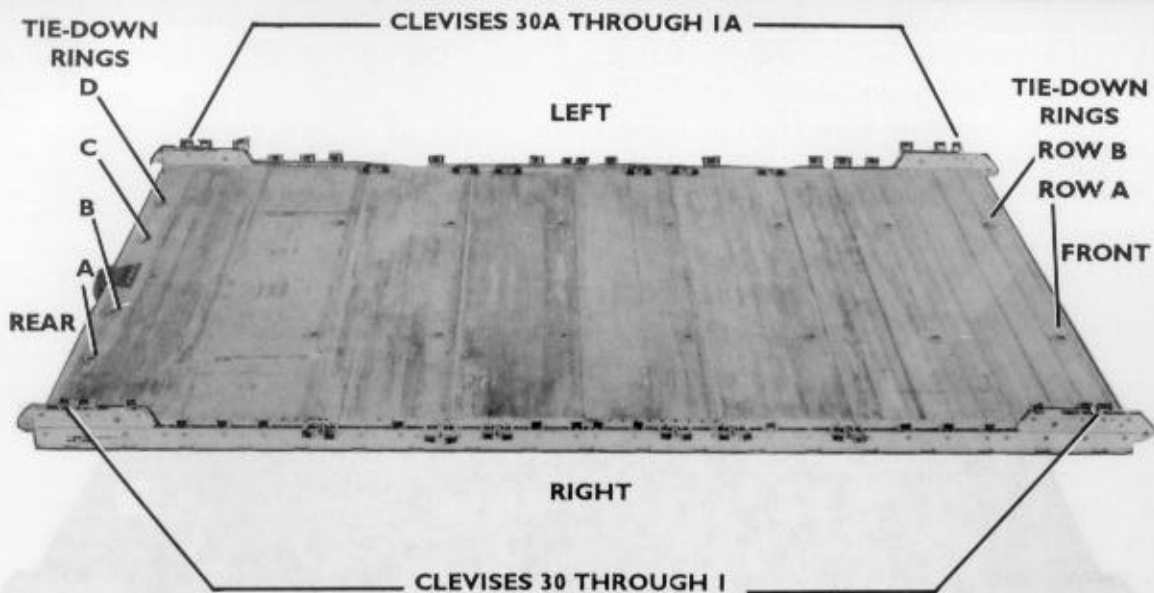
a. Inspecting Platform. Inspect, or assemble and inspect, the 16-foot, type V airdrop platform as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.

b. Installing Tandem Links. Install tandem links on the front and rear of each rail as shown in Figure 15-26.

c. Installing and Numbering Clevises. Bolt and number 72 clevis assemblies as shown in Figure 15-26.

Notes:

1. The nose bumper may or may not be installed.
2. Measurements given in this section are from the front edge of the platform, NOT from the front edge of the nose bumper.

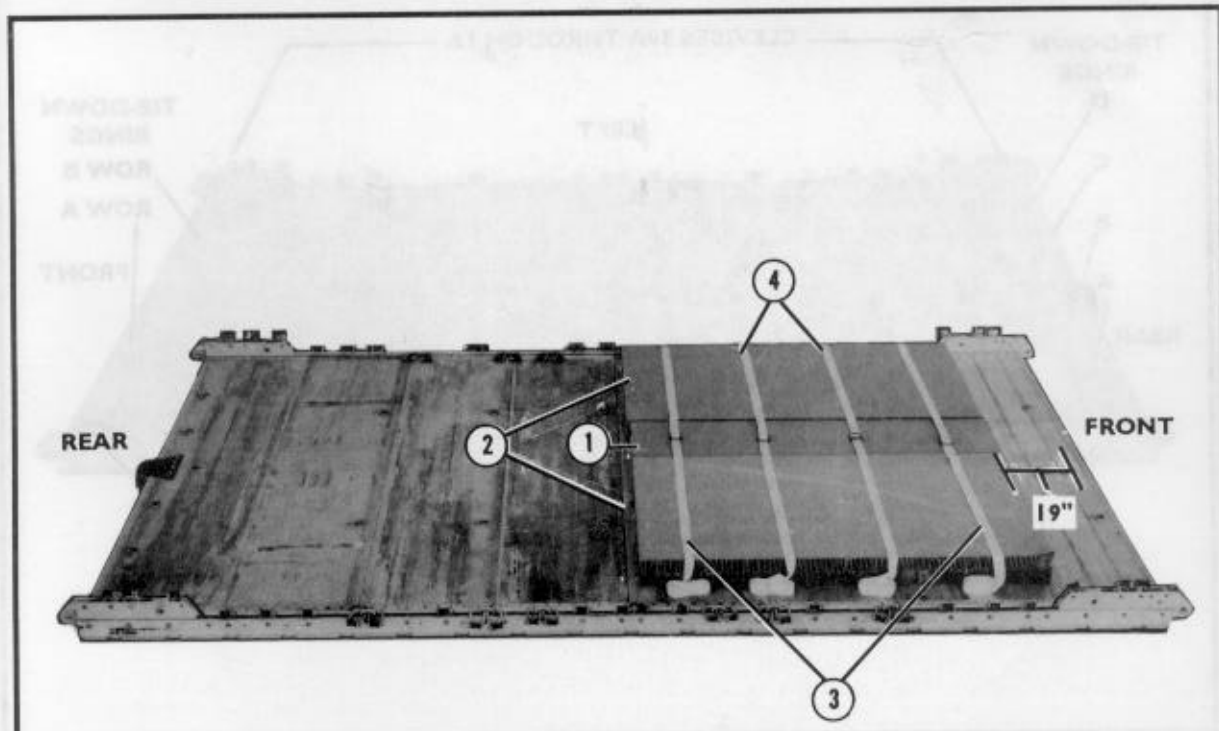
**Step:**

1. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
2. Install a tandem link on the rear of each platform side rail using holes 30, 31, and 32.
3. Install clevises on bushings 2, 3, and 4 of each front tandem link.
4. Install clevises on bushings 1, 2, and 3 of each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 5, 6, 7, 9, 11, 12, 14, 15, 16, 17, 18, 19, 21, 22, 24, 26, 27, and 28. Reverse the clevises on holes 9, 12, 14, 19, 21 and 24. Install two clevises on each of the reversed clevises.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 30, and those bolted to the left side from 1A through 30A.
7. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

Figure 15-26. Platform prepared

15-35. Building Honeycomb Stacks and Placing First Stack

Build the honeycomb stack for the first stack of ammunition and place it on the platform as shown in Figure 15-27. Build a second stack as shown in Figure 15-27 and set it aside.

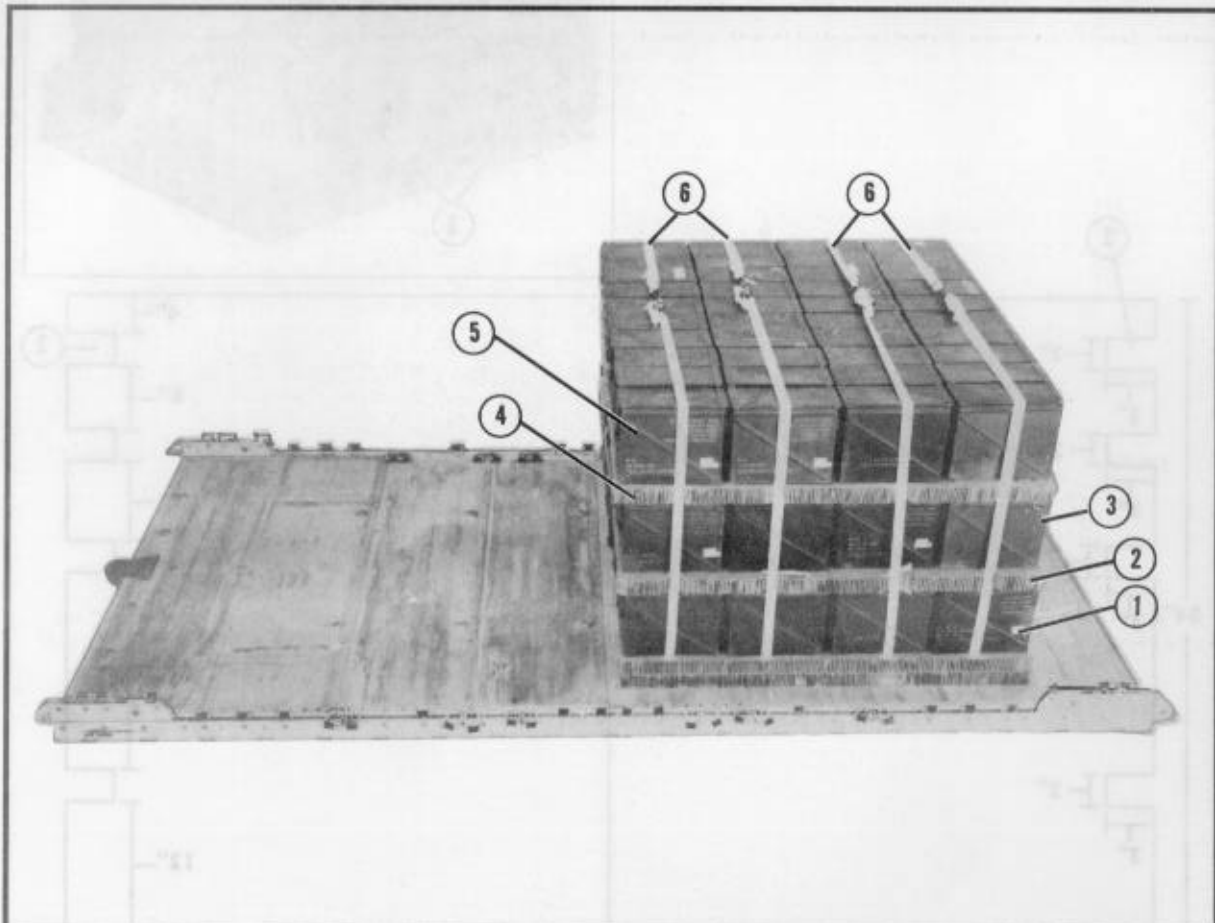


- ① Center two 15- by 75-inch pieces of honeycomb lengthwise on the platform, 19 inches from the front edge.
- ② Place two 36- by 75-inch pieces of honeycomb flush on each side of the pieces placed in step 1.
- ③ Center a 30-foot lashing 10 inches from each end of the honeycomb.
- ④ Center a 30-foot lashing 26 inches from the front edge of the honeycomb, and another 30-foot lashing 26 inches from the rear.

Figure 15-27. Honeycomb for first ammunition stack prepared and placed

15-36. Positioning and Securing First Ammunition Stack

Set 120 boxes of 20-millimeter ammunition on the honeycomb and pre-position lashings. Secure the lashings as shown in Figure 15-28.



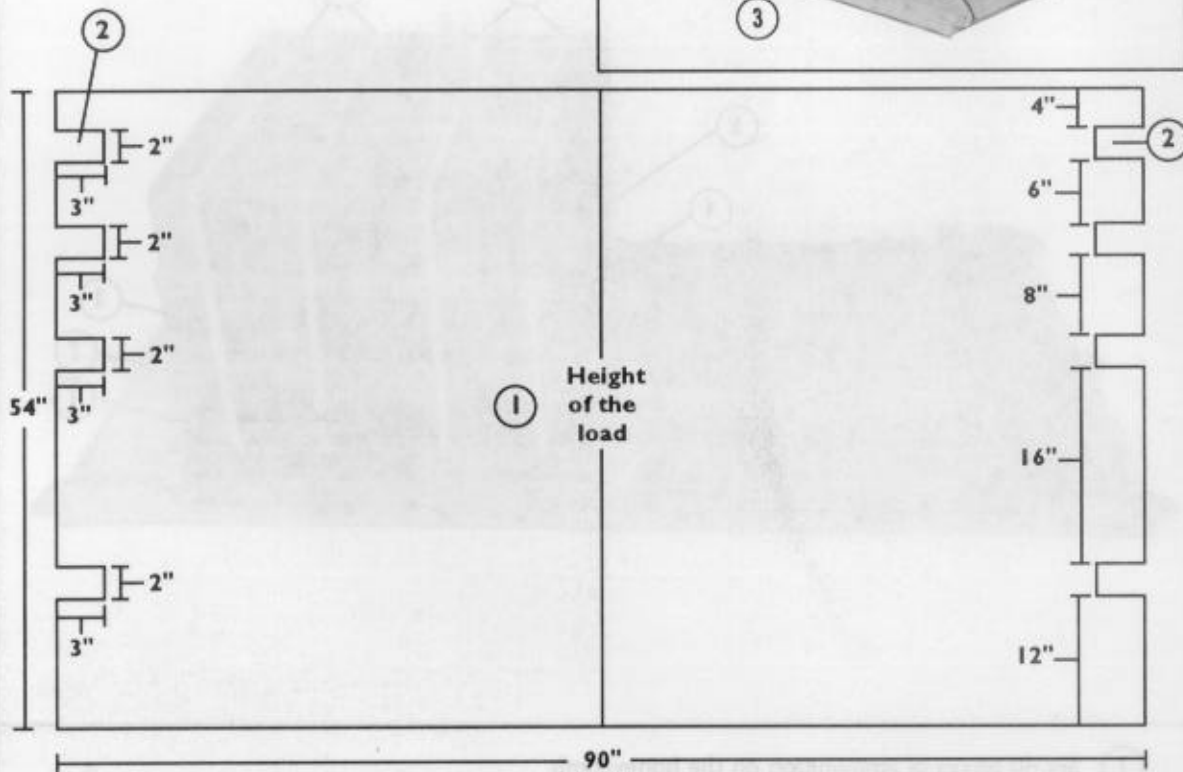
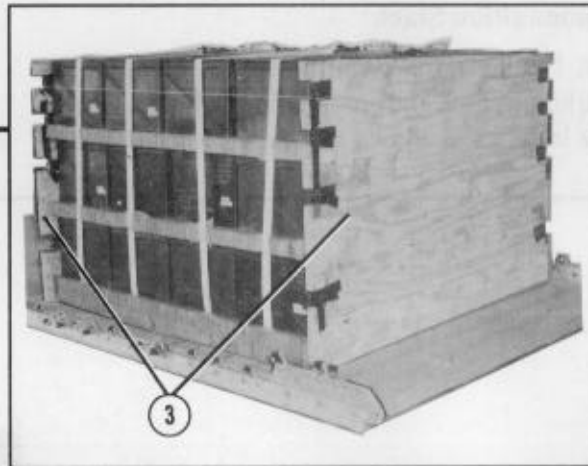
- ① Set 40 boxes of ammunition on the honeycomb.
- ② Place one layer of honeycomb cut to the dimensions in Figure 15-27, steps 1 and 2, over the boxes.
- ③ Place 40 boxes of ammunition over the honeycomb placed in step 2.
- ④ Place a layer of honeycomb over the second layer of boxes.
- ⑤ Place the third layer of boxes over the honeycomb placed in step 4.
- ⑥ Secure each of the pre-positioned lashings in Figure 15-27, steps 3 and 4, on top of the boxes with two D-rings and a load binder.

Figure 15-28. First ammunition stack placed and secured

15-37. Constructing Endboards

Construct four endboards as shown in Figure 15-29.

Note: This drawing is not drawn to scale.



- ① Cut two 3/4- by 48- by 90-inch and two 3/4- by 6- by 90-inch pieces of plywood. Nail the four pieces flush together so that a single piece of 1 1/2- by 56- by 90 inches results.

Note: On the endboard shown, the 6-inch piece is at the bottom. On the other side of the endboard shown, the 6-inch piece is at the top.

- ② Make 2- by 3-inch cutouts as shown. Pad all cutouts with cellulose wadding and tape.
- ③ Place an endboard against the front of the boxes and place one against the rear. Tie them in place with a length of type III nylon cord.

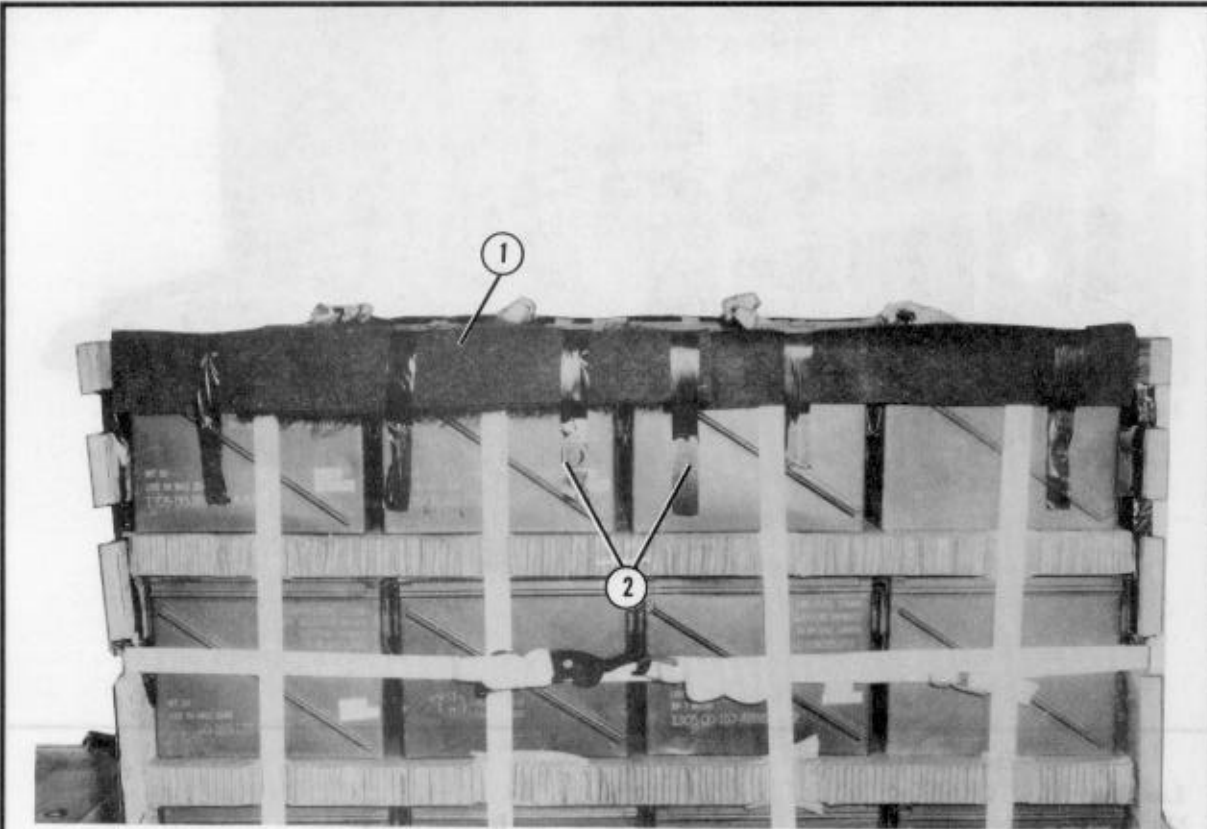
Figure 15-29. Endboards for 20-millimeter ammunition constructed and placed

15-38. Lashing First Ammunition Stack and First and Second Endboards

Cover the left and right upper edges of the stack of boxes with felt as shown in Figure 15-30. Lash the first and second endboards and the first ammunition stack to the platform as shown in Figure 15-31.

Note:

This load requires lashings over 30 feet in length. Lashings must be positioned through clevises before sections are joined together.

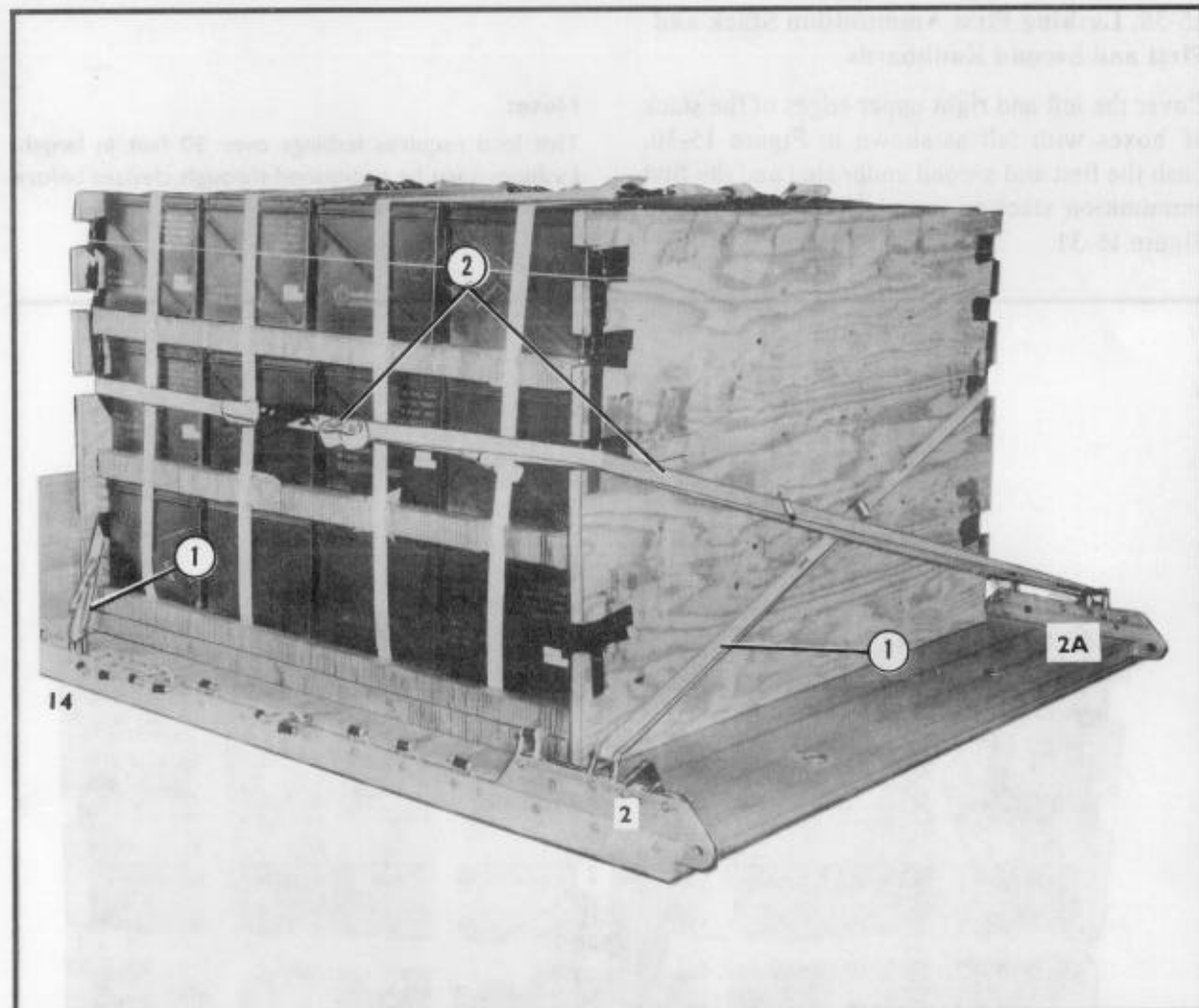


First a 60-foot lashing through clevis 2, through the third clevis from the top on the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the third clevis from the top on the left side of the second endboard and through clevis 1. Secure the lashing on the left side.

First a 60-foot lashing through clevis 2A, through the third clevis from the top on the right side.

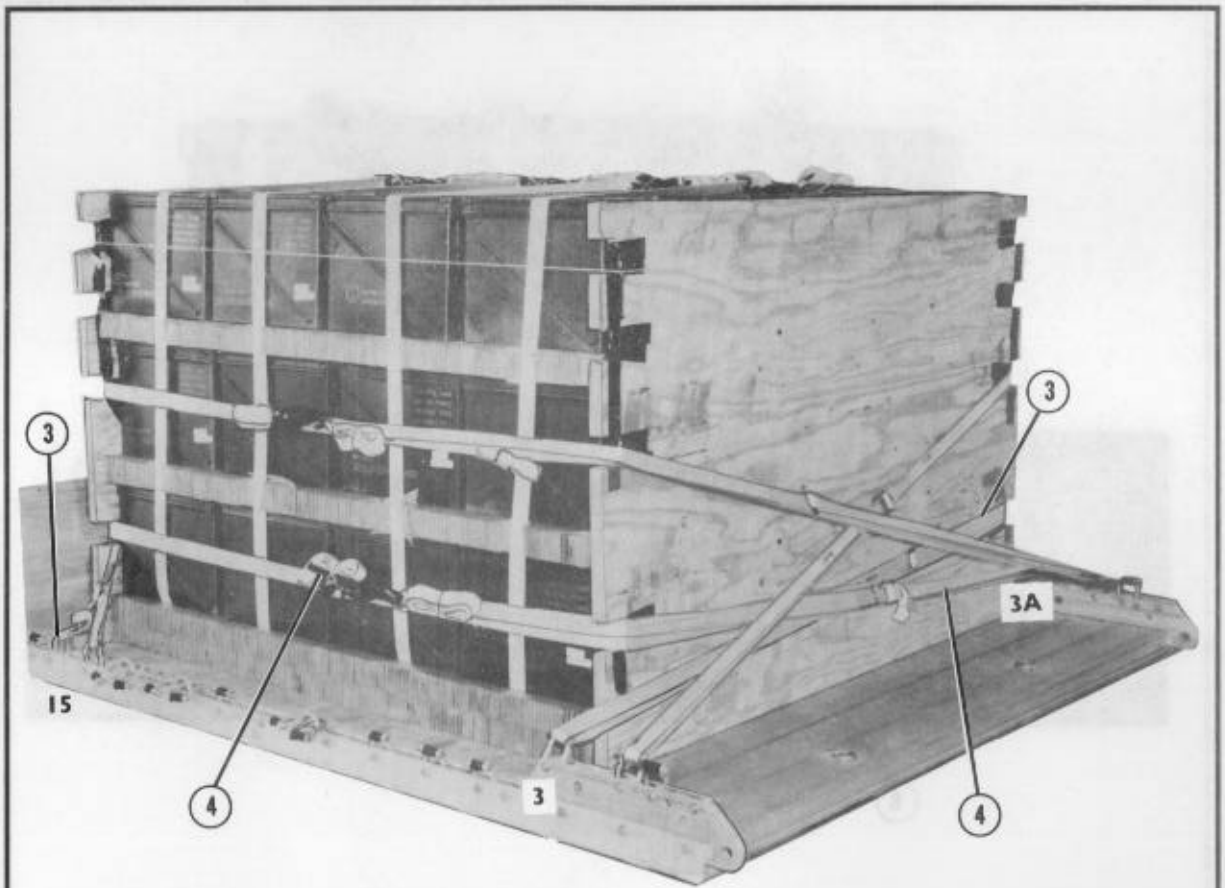
- ① Center a piece of felt, 75 inches long, over the left and right upper corners of the stack of boxes.
- ② Tape the felt in place.

Figure 15-31. Boxes padded with felt



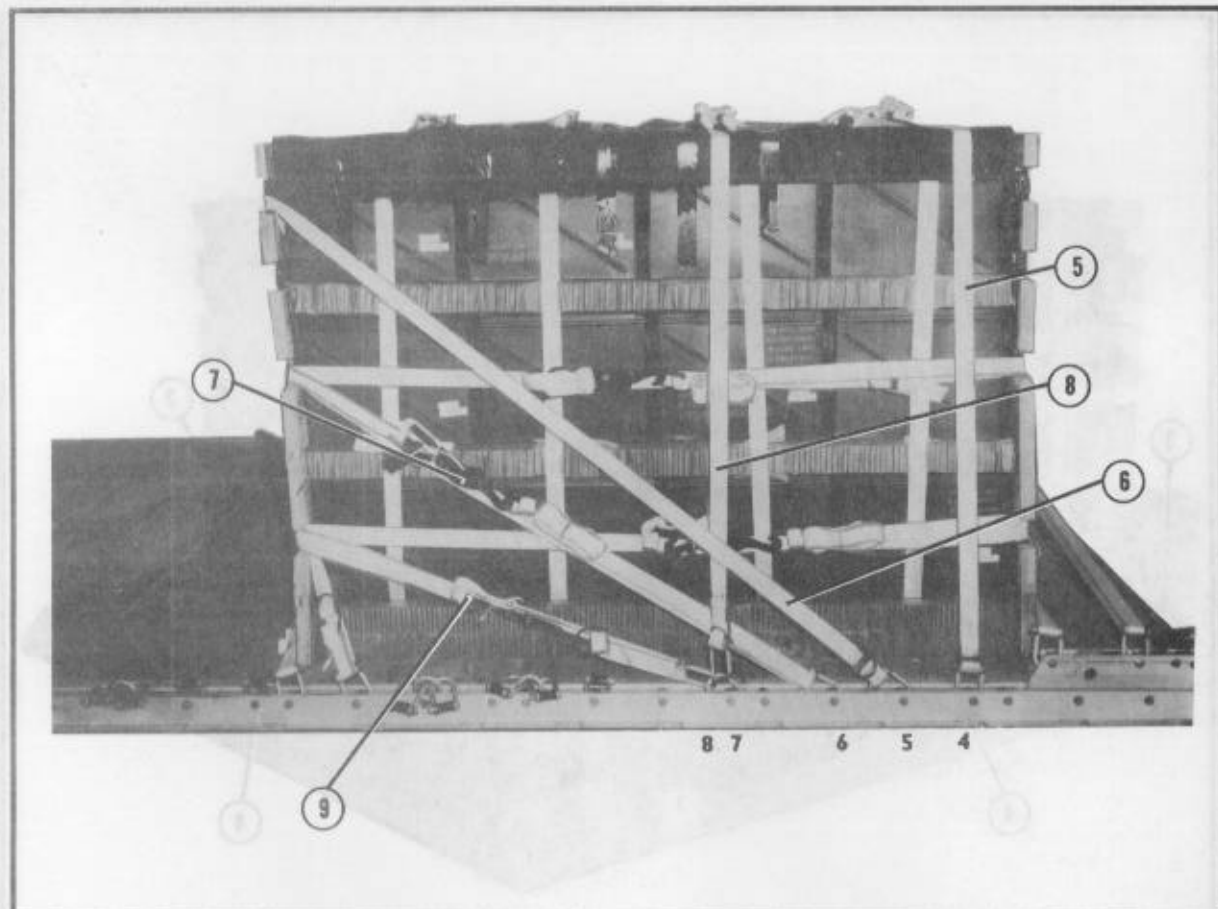
Lashing Number	Tie-Down Clevis Number	Instructions
1	2 and 14	Pass a 60-foot lashing through clevis 2, through the third cutout from the top in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the third cutout from the top in the left side of the second endboard and through clevis 14. Secure the lashing on the left side.
2	2A and 14A	Pass a 60-foot lashing through clevis 2A, through the third cutout from the top in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the third cutout from the top in the right side of the second endboard and through clevis 14A. Secure the lashing on the right side.

Figure 15-31. First ammunition stack and endboards lashed to platform



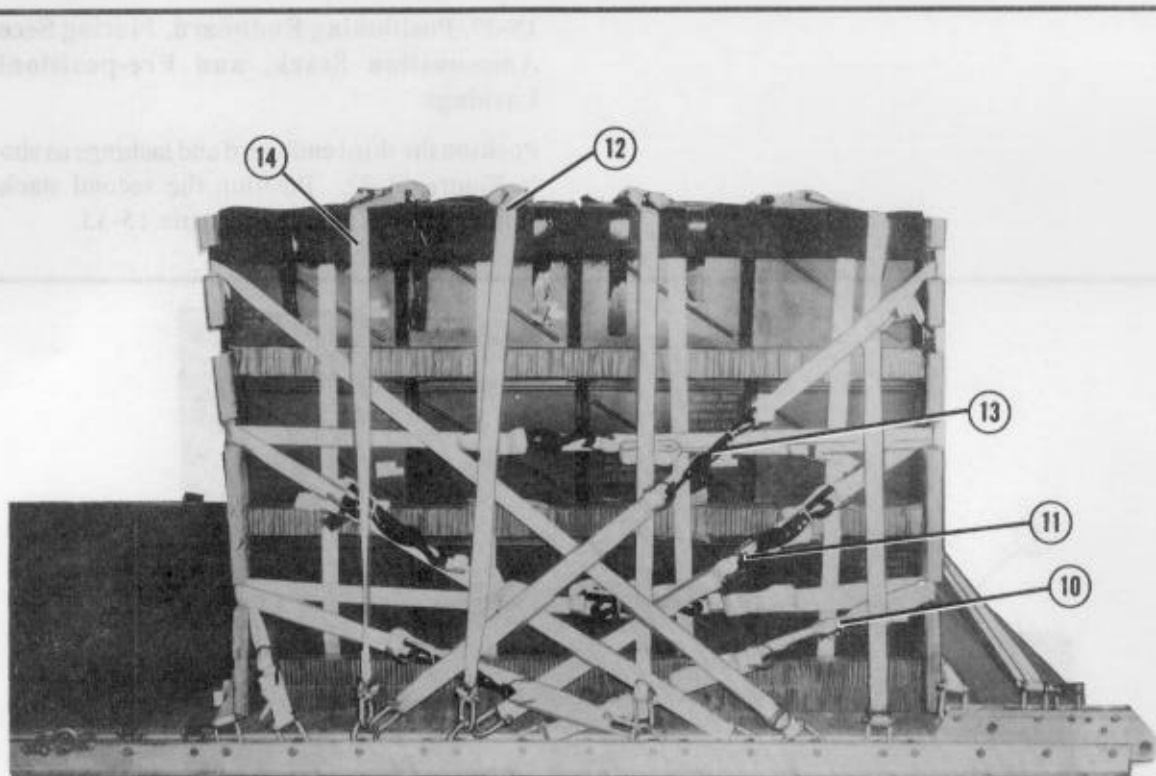
Lashing Number	Tie-Down Clevis Number	Instructions
3	3 and 15	Pass a 60-foot lashing through clevis 3, through the bottom cutout in the left side of the first endboard, and around the left side of the ammunition stack. Pass the lashing through the bottom cutout in the left side of the second endboard, and through clevis 15. Secure the lashing on the left side.
4	3A and 15A	Pass a 60-foot lashing through clevis 3A and through the bottom cutout in the right side of the first endboard, and around the right side of the ammunition stack. Pass the lashing through the bottom cutout in the right side of the second endboard, and through clevis 15A. Secure the lashing on the right side.

Figure 15-31. First ammunition stack and endboards lashed to platform (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
5	4 and 4A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the boxes.
6	5 and 5A	Pass a 45-foot lashing through both clevises and through the top cutouts in the second endboard. Secure the lashing on the side of the load.
7	6 and 6A	Pass a 45-foot lashing through both clevises and through the third cutouts from the top in the second endboard. Secure the lashing on the side of the load.
8	7 and 7A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the boxes.
9	8 and 8A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the second endboard. Secure the lashing on the side of the load.

Figure 15-31. First ammunition stack and endboards lashed to platform (continued)



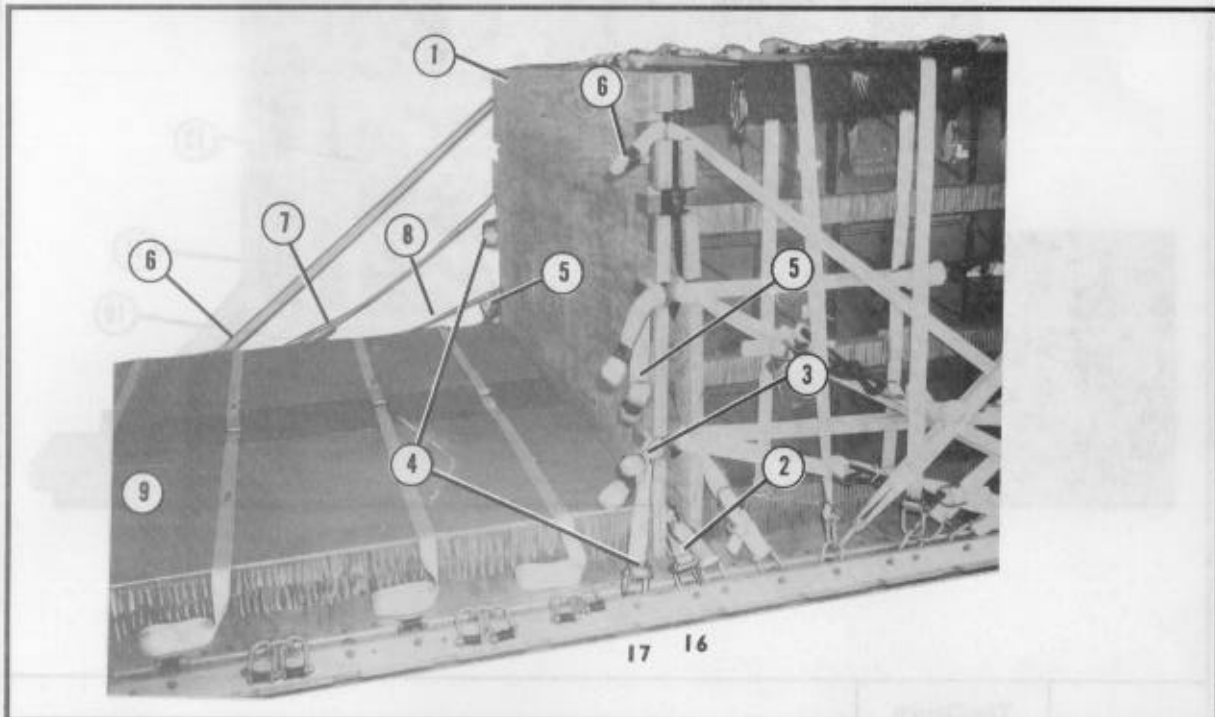
13 12 11 10 9

Lashing Number	Tie-Down Clevis Number	Instructions
10	9 and 9A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the first endboard. Secure the lashing on the side of the load.
11	10 and 10A	Pass a 45-foot lashing through both clevises and through the third cutout from the top in the first endboard. Secure the lashing on the side of the load.
12	11 and 11A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the boxes.
13	12 and 12A	Pass a 45-foot lashing through both clevises and through the top cutout in the first endboard. Secure the lashing on the side of the load.
14	13 and 13A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the boxes.

Figure 15-31. First ammunition stack and endboards lashed to platform (continued)

15-39. Positioning Endboard, Placing Second Ammunition Stack, and Pre-positioning Lashings

Position the third endboard and lashings as shown in Figure 15-32. Position the second stack of ammunition as shown in Figure 15-33.

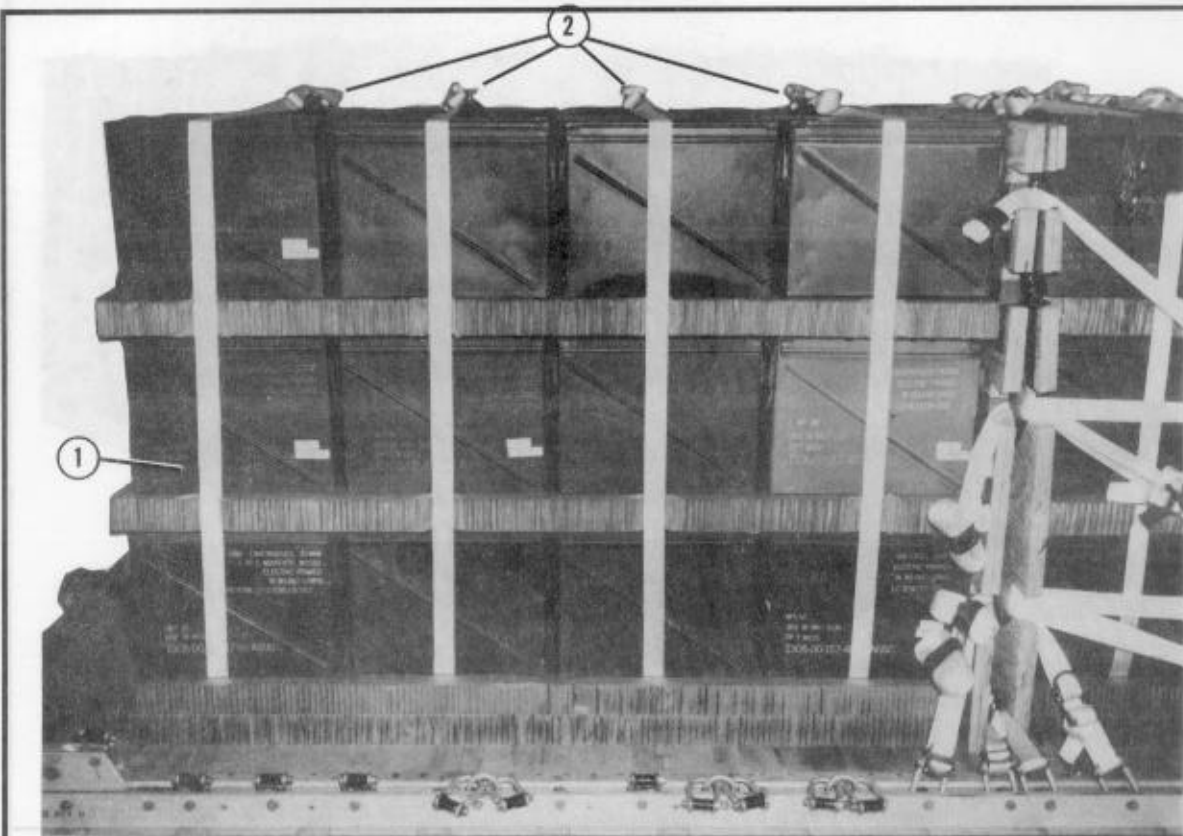


- ① Set the third endboard against the rear of the load.
- ② Pass a 60-foot lashing through clevis 16 and through the bottom left cutout in the third endboard. Roll and tape the ends.
- ③ Pass a 60-foot lashing through clevis 16A and through the bottom right cutout in the third endboard. Roll and tape the ends.
- ④ Pass a 60-foot lashing through clevis 17, through the bottom right cutout, and the third cutout from the top in the left side of the third endboard. Roll and tape the ends.
- ⑤ Pass a 60-foot lashing through clevis 17A, through the bottom left cutout, and the third cutout from the top in the right side of the third endboard. Roll and tape the ends.
- ⑥ Pass a 45-foot lashing through clevis 26A and through both top cutouts in the third endboard. Roll and tape the ends.
- ⑦ Pass a 45-foot lashing through clevis 25A and through the third cutout from the top on both sides of the third endboard. Roll and tape the ends.

Figure 15-32. Pre-positioning lashings on third endboard

- ⑧ Pass a 30-foot lashing through clevis 23A and through both bottom cutouts in the third endboard. Roll and tape the ends.
- ⑨ Position the second honeycomb stack 17 inches from the rear edge of the platform. Pre-position four 30-foot lashings on the honeycomb as shown in Figure 15-27, steps 3 and 4.

Figure 15-32. Pre-positioning lashings on third endboard (continued)

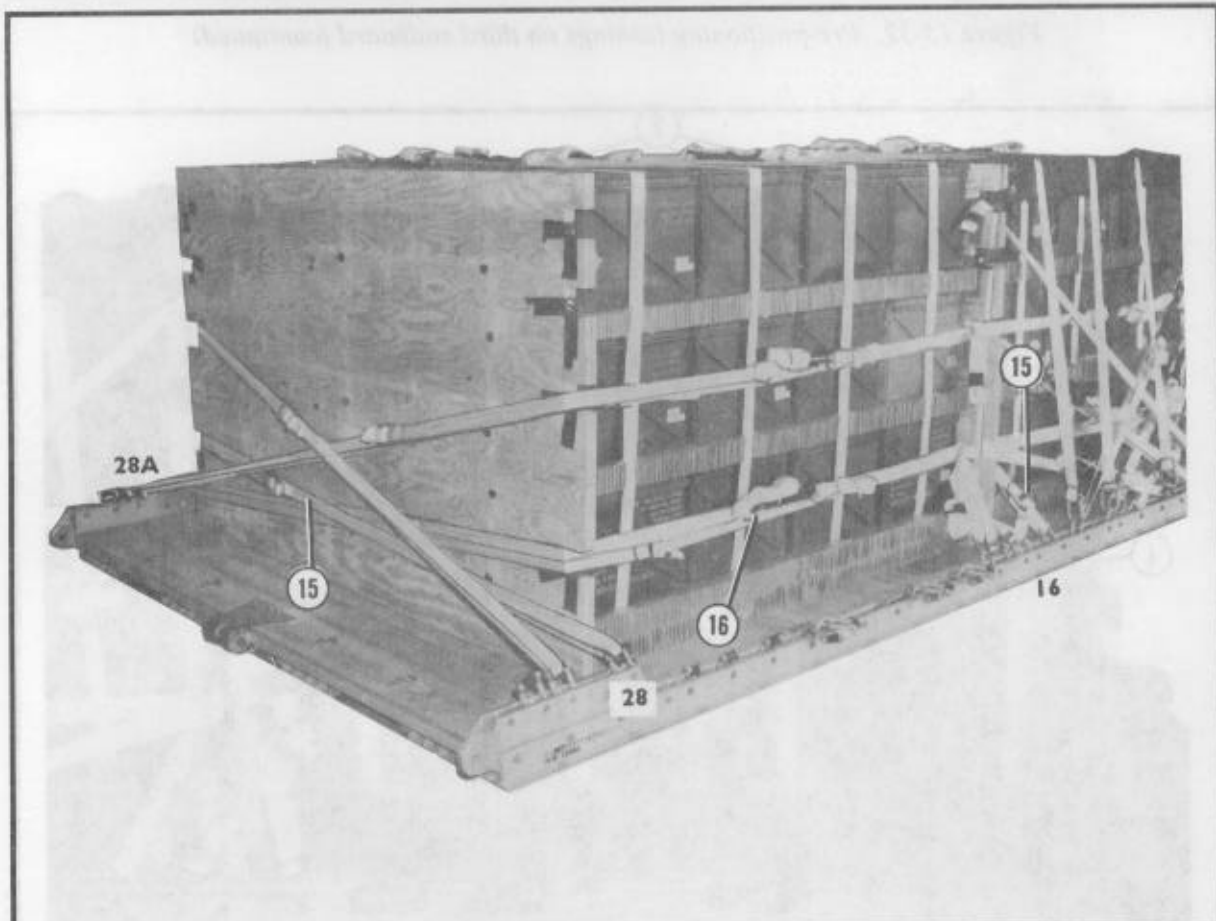


- ① Stow 120 boxes of ammunition on the honeycomb as shown in Figure 15-28.
- ② Secure each of the pre-positioned lashings on top of the boxes with two D-rings and a load binder.
- ③ Pad the left and right upper edges of the boxes with felt as shown in Figure 15-30 (not shown).
- ④ Place the fourth endboard against the rear of the load. Safety tie it to convenient points for temporary support (not shown).

Figure 15-33. Second stack of ammunition positioned

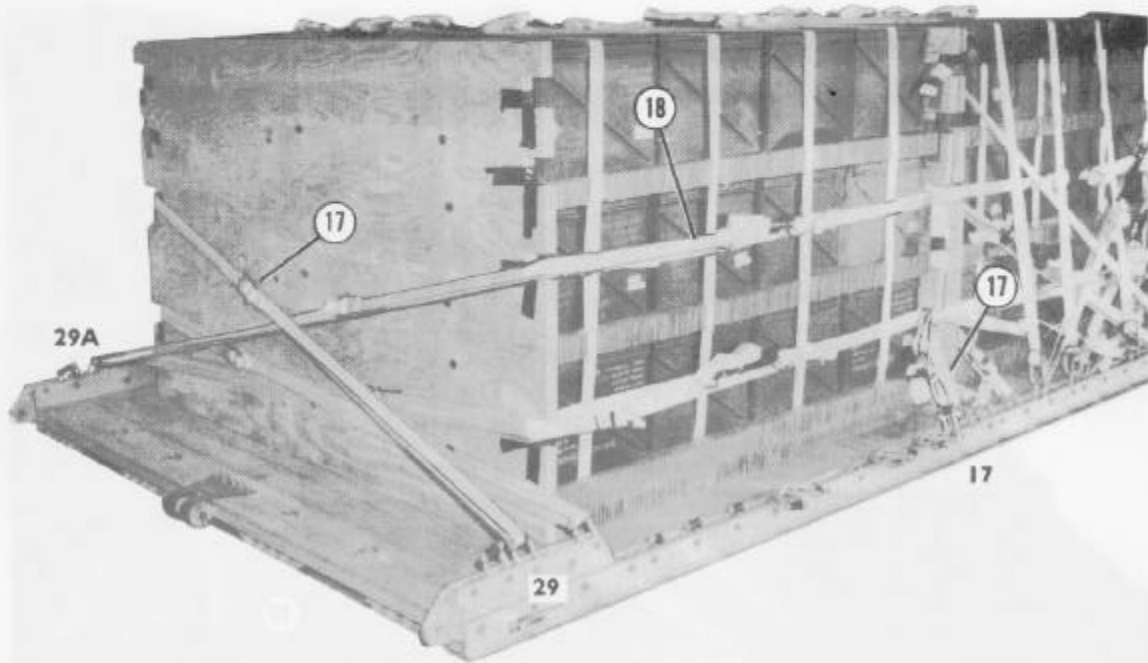
15-40. Lashing Second Ammunition Stack and Third and Fourth Endboards

Lash the third and fourth endboards and the second ammunition stack to the platform as shown in Figure 15-34.



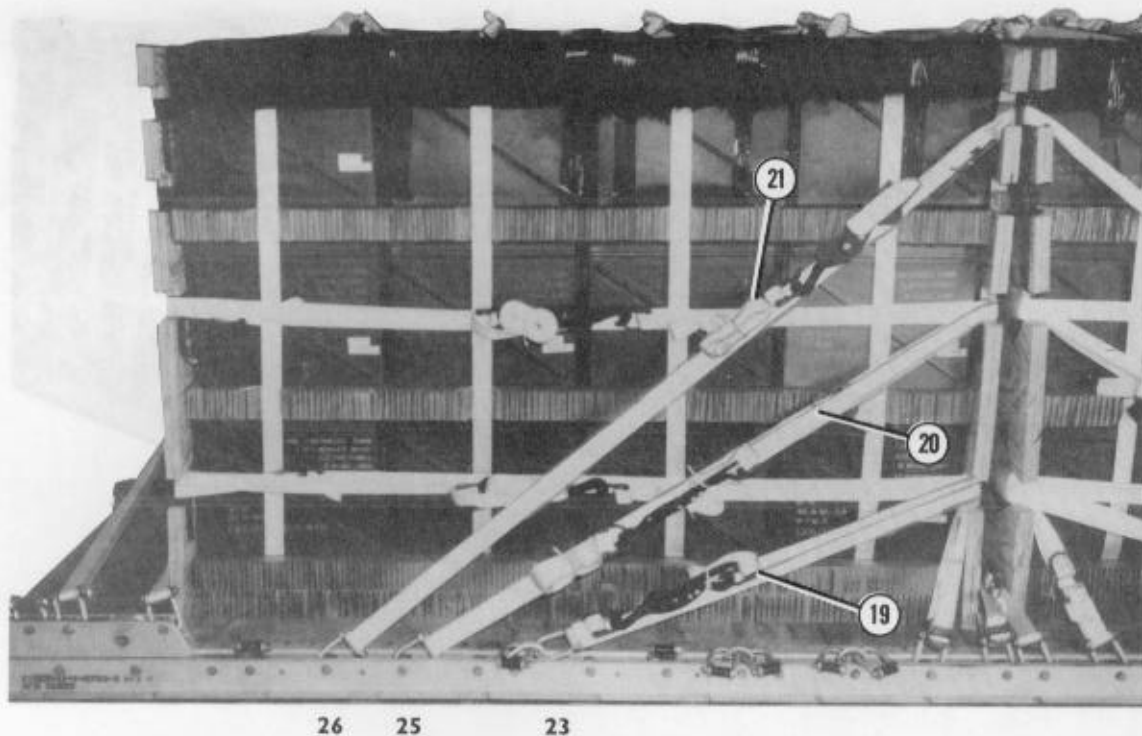
Lashing Number	Tie-Down Clevis Number	Instructions
15	16 and 28	Pass the pre-positioned lashing in Figure 15-32, step 2, around the left side of the boxes, through the bottom left cutout in the fourth endboard and through clevis 28. Secure the lashing on the left side.
16	16A and 28A	Pass the pre-positioned lashing in Figure 15-32, step 3, around the right side of the boxes, through the bottom right cutout in the fourth endboard and through clevis 28A. Secure the lashing on the right side.

Figure 15-34. Second ammunition stack and endboards lashed to platform



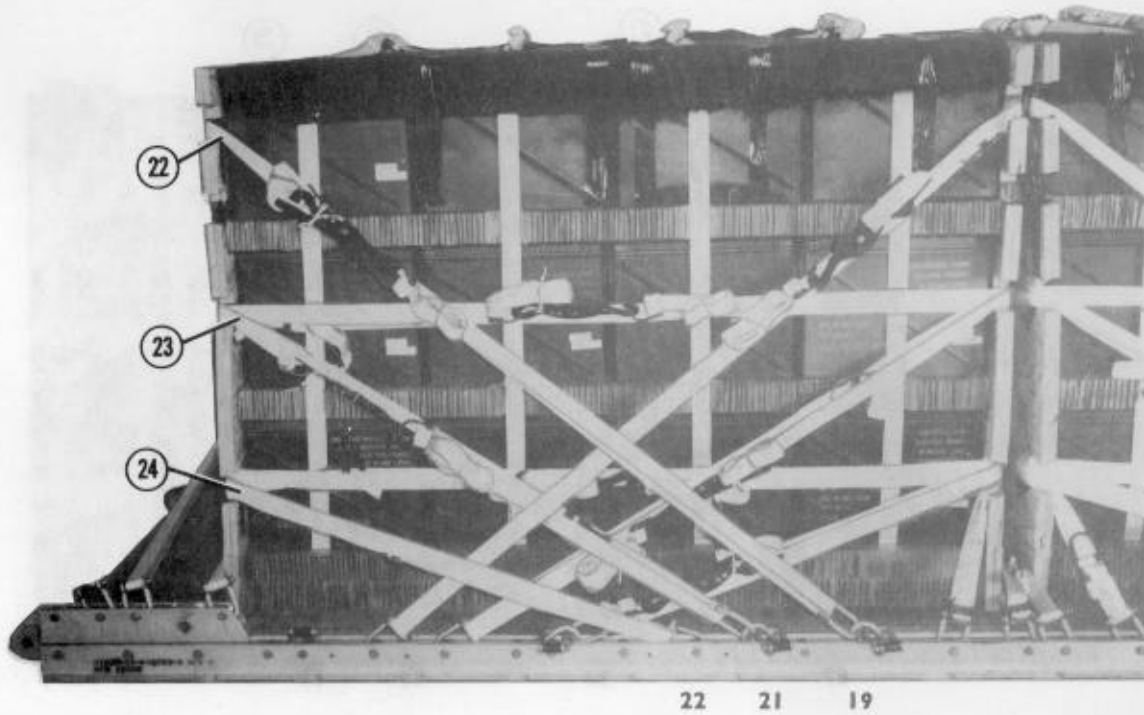
Lashing Number	Tie-Down Clevis Number	Instructions
17	17 and 29	Pass the pre-positioned lashing in Figure 15-32, step 4, around the left side of the boxes, through the third cutout from the top in the left side of the fourth endboard and through clevis 29. Secure the lashing on the left side.
18	17A and 29A	Pass the pre-positioned lashing in Figure 15-32, step 5, around the right side of the boxes, through the third cutout from the top in the right side of the fourth endboard and through clevis 29A. Secure the lashing on the right side.

Figure 15-34. Second ammunition stack and endboards lashed to platform (continued)



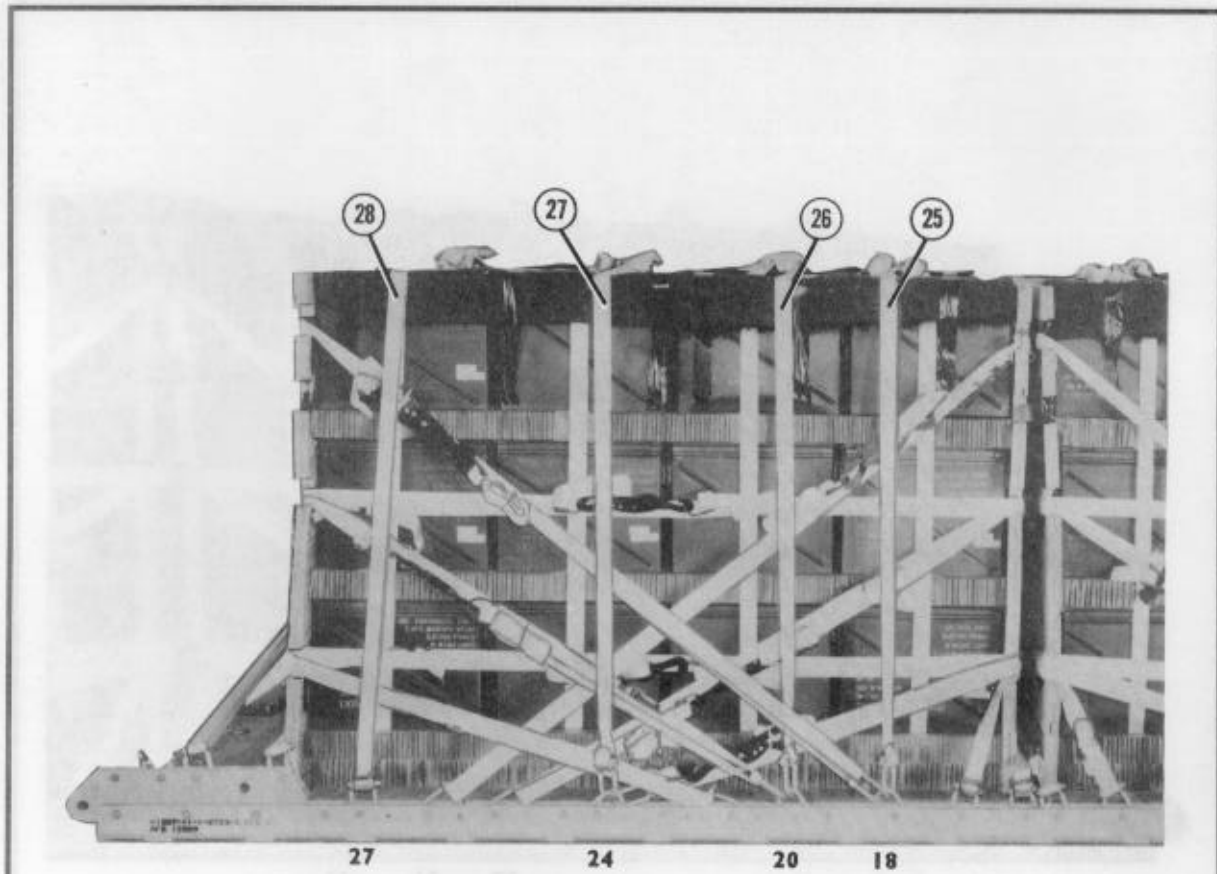
Lashing Number	Tie-Down Clevis Number	Instructions
19	23 and 23A	Pass the pre-positioned lashing in Figure 15-32, step 8 through clevis 23. Secure the lashing on the right side.
20	25 and 25A	Pass the pre-positioned lashing in Figure 15-32, step 7 through clevis 25. Secure the lashing on the right side.
21	26 and 26A	Pass the pre-positioned lashing in Figure 15-32, step 6 through clevis 26. Secure the lashing on the right side.

Figure 15-34. Second ammunition stack and endboards lashed to platform (continued)



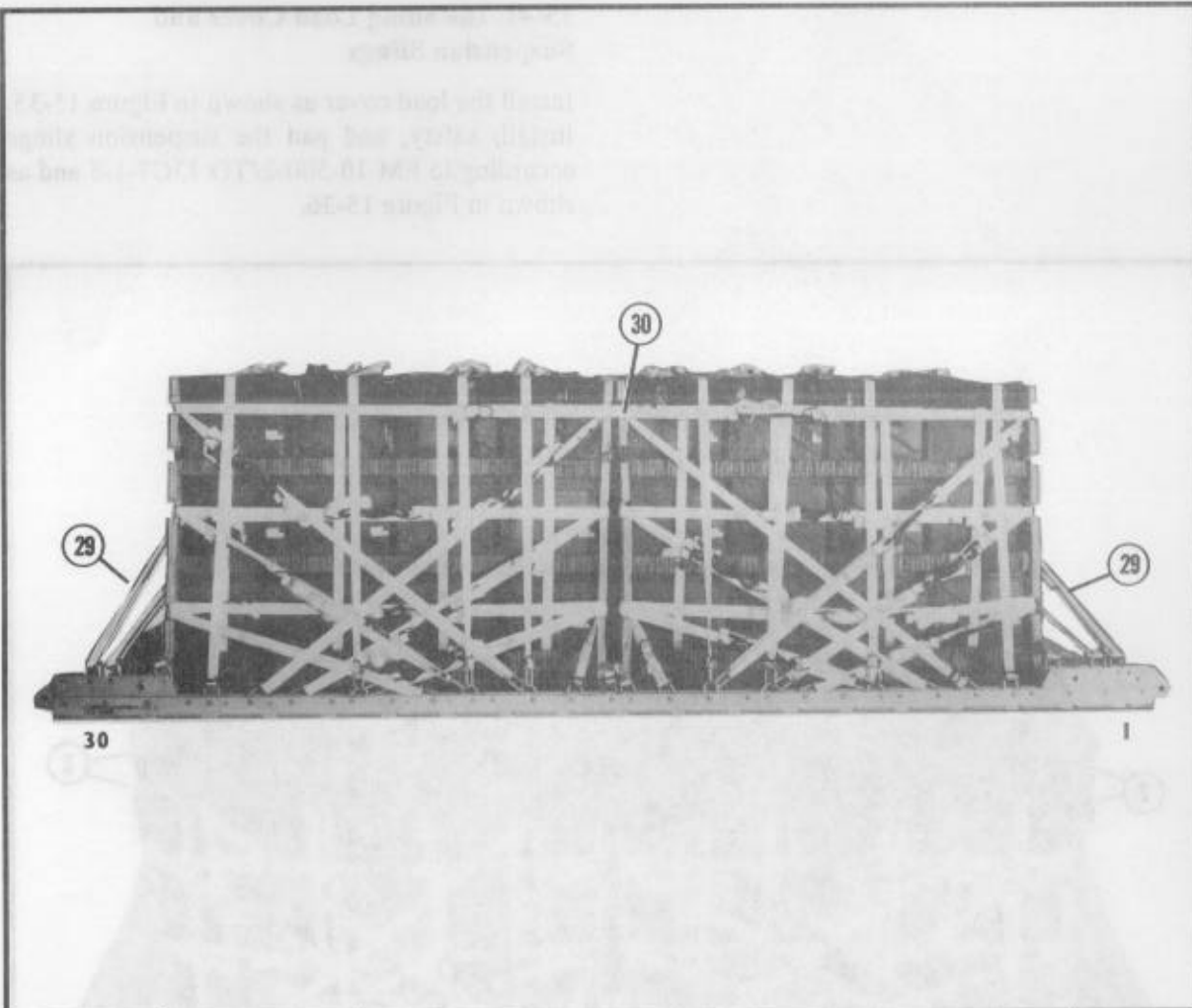
Lashing Number	Tie-Down Clevis Number	Instructions
22	19 and 19A	Pass a 45-foot lashing through both clevises and through the top cutouts in the fourth endboard. Secure the lashing on the side.
23	21 and 21A	Pass a 45-foot lashing through both clevises and through the third cutouts from the top in the fourth endboard. Secure the lashing on the side.
24	22 and 22A	Pass a 30-foot lashing through both clevises and through the bottom cutouts in the fourth endboard. Secure the lashing on the side.

Figure 15-34. Second ammunition stack and endboards lashed to platform (continued)



Lashing Number	Tie-Down Clevis Number	Instructions
25	18 and 18A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top.
26	20 and 20A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top.
27	24 and 24A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top.
28	27 and 27A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top.

Figure 15-34. Second ammunition stack and endboards lashed to platform (continued)

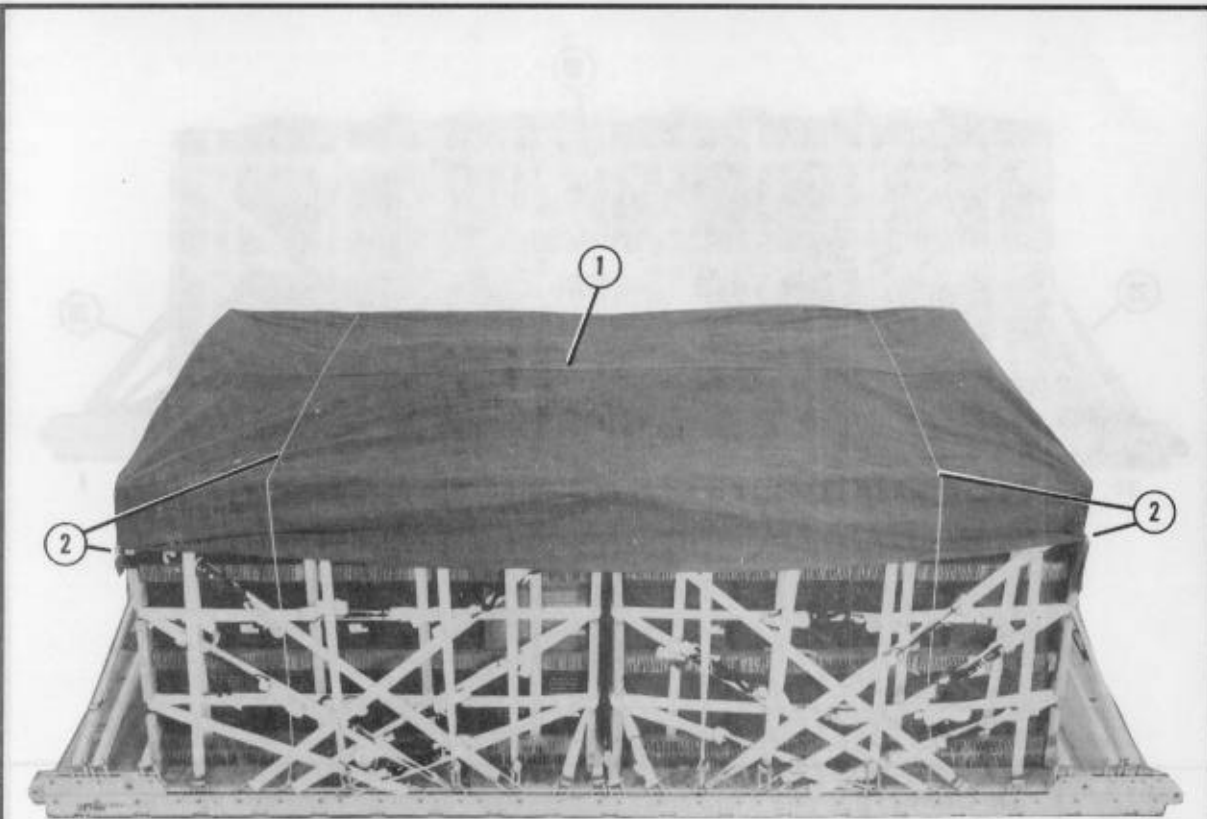


Lashing Number	Tie-Down Clevis Number	Instructions
29	1 and 30	Pass a 75-foot lashing through clevis 1, through the top cutout in the left side of the first endboard, and around the left side of both ammunition stacks. Pass the lashing through the top cutout in the left side of the fourth endboard and through clevis 30. Secure the lashing on the left side.
30	1A and 30A	Pass a 75-foot lashing through clevis 1A, through the top cutout in the right side of the first endboard, and around the right side of both ammunition stacks. Pass the lashing through the top cutout in the right side of the fourth endboard and through clevis 30A. Secure the lashing on the right side.

Figure 15-34. Second ammunition stack and endboards lashed to platform (continued)

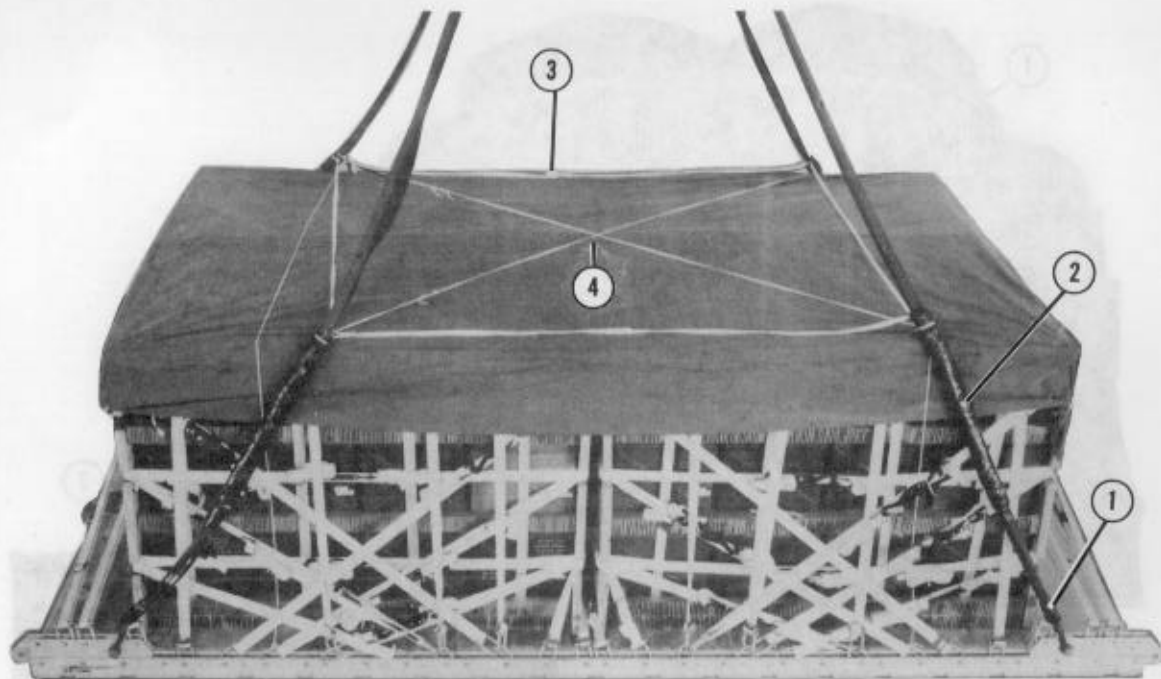
15-41. Installing Load Cover and Suspension Slings

Install the load cover as shown in Figure 15-35. Install, safety, and pad the suspension slings according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-36.



- ① Sew two pieces of 5- by 15-foot cotton duck cloth together to make a load cover 10 feet wide and 15 feet long.
- ② Tie the corners of the cover to convenient points on the load. Secure the cover to the load with two lengths of type III nylon cord tied to tie-down clevises.

Figure 15-35. Load cover installed

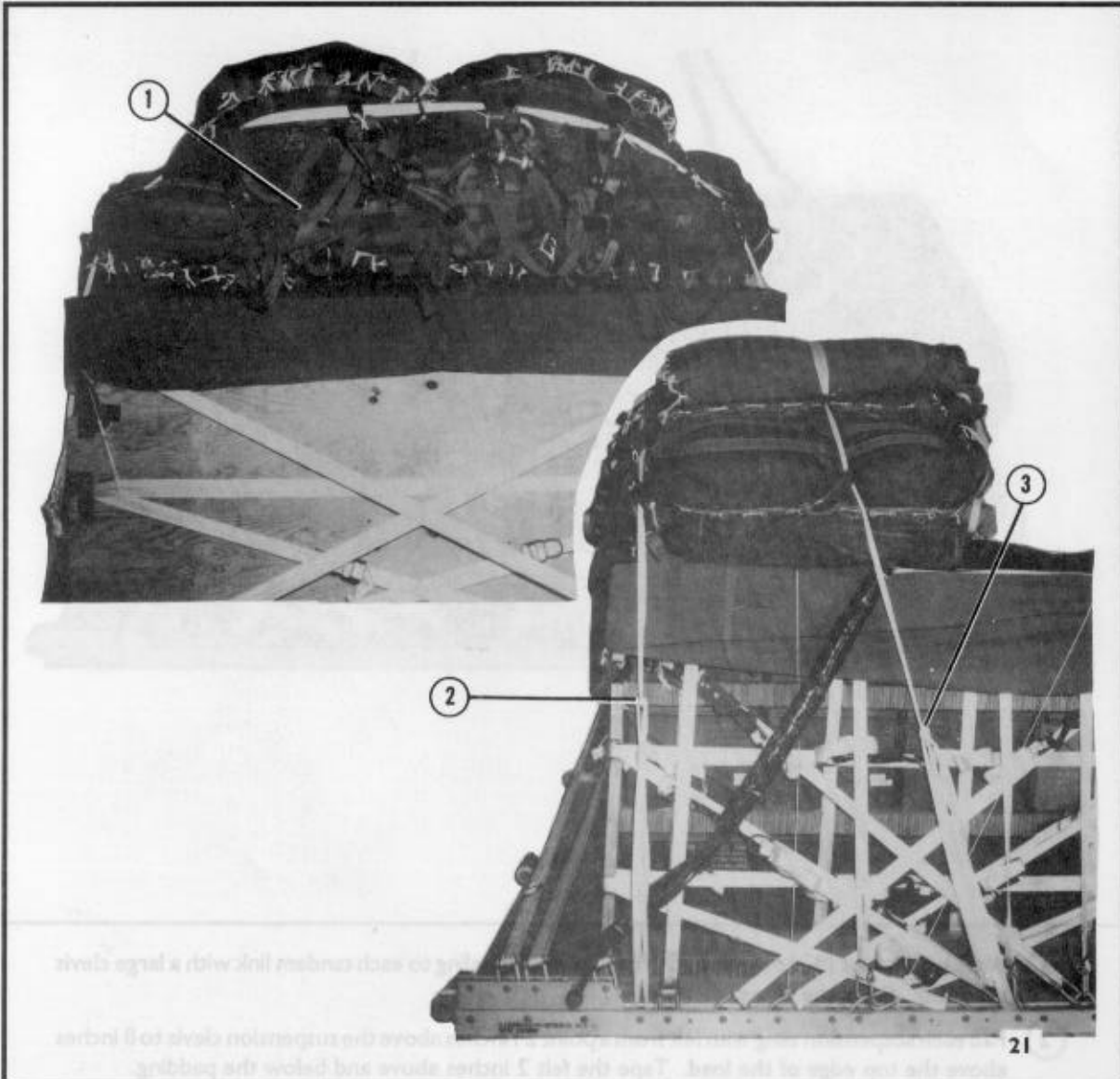


- ① Attach a 16-foot (4-loop), type XXVI nylon webbing sling to each tandem link with a large clevis assembly. Raise the slings.
- ② Pad each suspension sling with felt from a point 24 inches above the suspension clevis to 8 inches above the top edge of the load. Tape the felt 2 inches above and below the padding.
- ③ Install the deadman's tie according to FM 10-500-2/TO 13C7-1-5.
- ④ Tie a single length of 1/2-inch tubular nylon webbing between the right front and left rear suspension slings at the same level as the deadman's tie. Tie the right rear and left front suspension slings together in the same way.

Figure 15-36. Suspension slings installed and safetied

15-42. Installing Parachutes

Install and restrain five G-11B cargo parachutes according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-37.

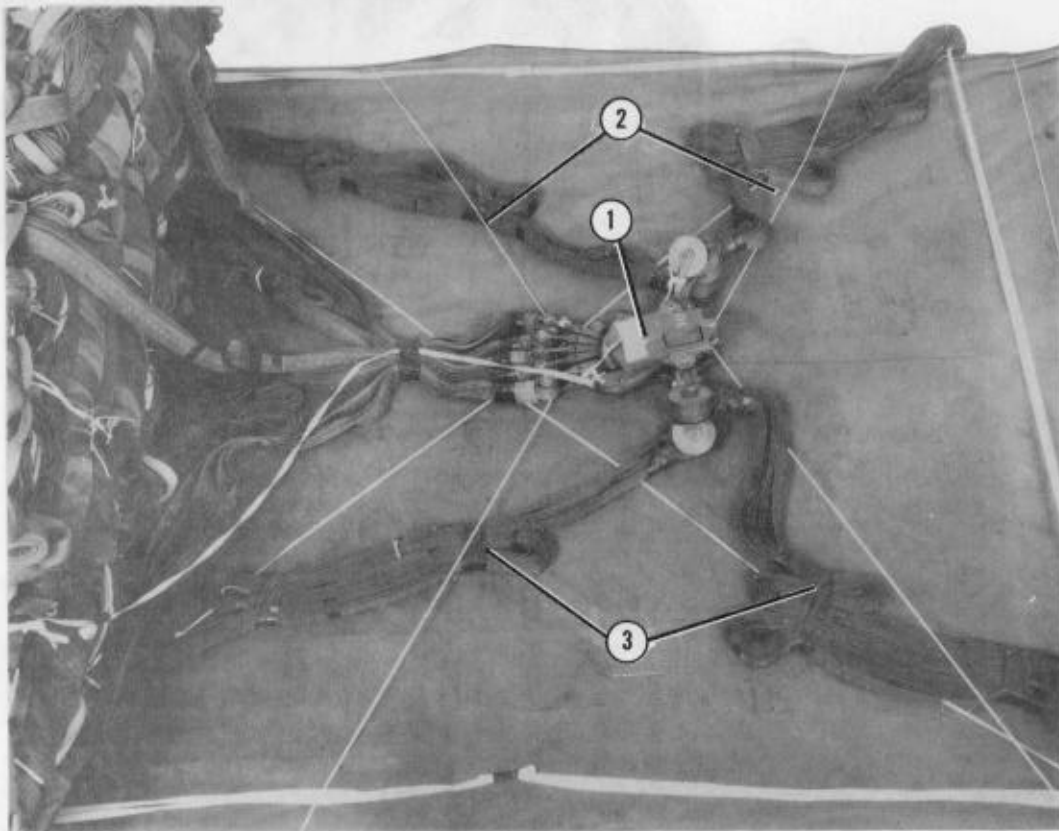


- ① Install five G-11B cargo parachutes at the rear of the load.
- ② Tie the rear parachute restraint strap to platform bushings 29 and 29A.
- ③ Tie the front parachute restraint strap to clevises 21 and 21A.

Figure 15-37. G-11B cargo parachutes installed

15-43. Installing Release System

Install and safety an M-2 cargo parachute release assembly as shown in Figure 15-38.

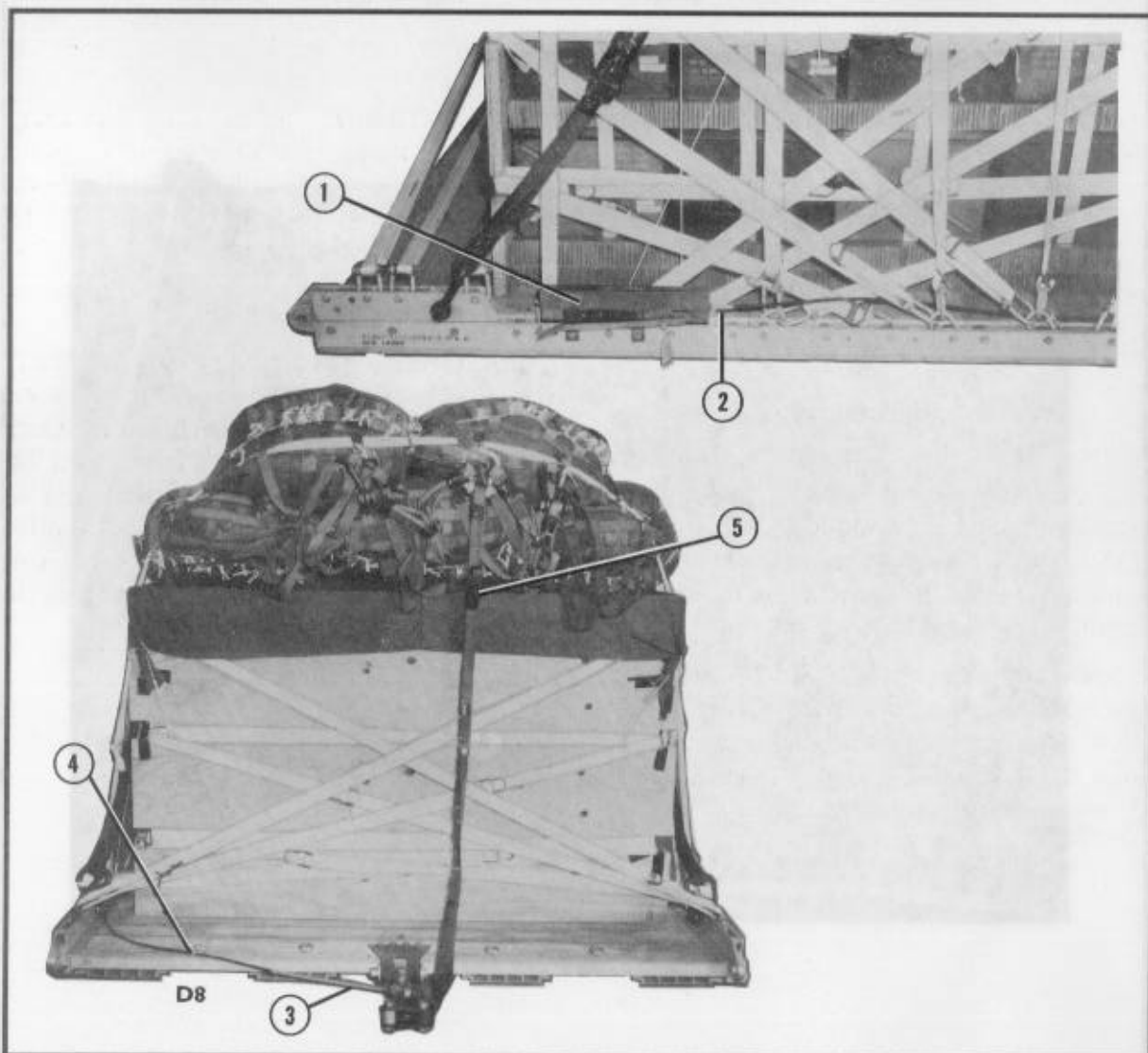


- ① Prepare and install an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Place the release assembly in front of the parachutes as shown.
- ② Safety the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie or tape the slack in the suspension slings.

Figure 15-38. Release assembly installed

15-44. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-39.



- ① Install the EFTA actuator brackets to the front mounting holes on the left platform side rail.
- ② Attach a 16-foot release cable to the actuator. Install the actuator to the brackets and run the cable toward the rear.
- ③ Install the latch assembly to the extraction bracket. Attach the release cable to the latch assembly.

Figure 15-39. Extraction system installed

- ④ Tie the cable to tie-down ring D8 with type I, 1/4-inch cotton webbing.
- ⑤ Install a 12-foot (2-loop), type XXVI nylon webbing sling as the deployment line. S-fold the slack and tape or tie the folds.

Figure 15-39. Extraction system installed (continued)

15-45. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints according to FM 10-500-2/TO 13C7-1-5.

15-46. Placing Extraction Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for extraction parachute requirements. Position the extraction parachutes for the load shown 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-141B 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.

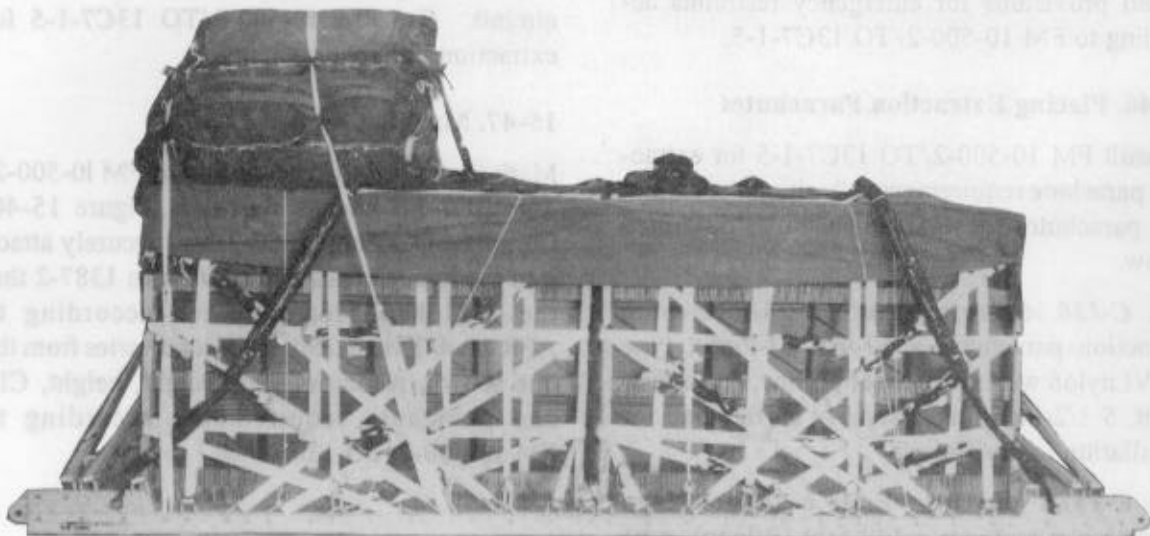
c. C-5 Aircraft. Place a 28-foot cargo extraction parachute and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

15-47. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-40. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load had been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, recompute the weight, height, CB, and parachute requirements according to FM 10-500-2/TO 13C7-1-5.

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:	Load shown.....	26,060 pounds
Height	.....	92 inches
Width	.....	108 inches
Length	.....	192 inches
Overhang: Front	.....	0 inches
Rear	.....	0 inches
CB (from front edge of platform)	.....	91 inches
Extraction System (adds 18 inches to length of platform)	.....	EFTC

Figure 15-40. 20-millimeter ammunition rigged on a 16-foot, type V platform for low-velocity airdrop

15-48. Equipment Required

Use the equipment listed in Table 15-3 to rig the load shown.

Table 15-3. Equipment required for rigging 20-millimeter ammunition on a 16-foot type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
4030-00-090-5354	Clevis, suspension, 1-in (large)	7
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer w 16-ft cable	1
1670-00-360-0329	Cover, link assembly, type IV	20
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
8305-00-958-3685	Felt sheet, 1/2-in	As required
1670-01-183-2678	Leaf, extraction line	2
	* Line, extraction, type XXVI nylon webbing:	
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, 5 1/2-in:	1
5306-00-435-8994	Bolt, 1-in diam, 4 in long	(2)
5310-00-232-5165	Nut, 1-in	(2)
1670-00-003-1954	Plate, side, 5 1/2-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV	20
5315-00-010-4657	Nail, steel wire, common, 6d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	20 sheets
	15- by 75-in	16
	36- by 75-in	16
1670-01-016-7841	Parachute, cargo, G-11B	5
	Parachute, cargo extraction:	
1670-01-063-3715	15-ft	1
1670-00-040-8135	28-ft	1
	Platform, AD, type V, 16-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis assembly (type V)	(72)

*Both extraction lines may be needed for C-5 aircraft.

Table 15-3. Equipment required for rigging 20-millimeter ammunition on a 16-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
1670-01-162-2381	Tandem link (multipurpose)	(4)
5530-00-128-4981	Plywood, 3/4-in:	10 sheets
	8- by 90-in	8
	48- by 90-in	8
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 suspension:	
1670-00-432-2507	16-ft (4-loop)	4
	For riser extension:	
1670-01-062-6302	20-ft (2-loop)	20
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, PSA, cloth back, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	106
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in, natural	As required
8305-00-263-3591	Type VIII	As required

Section IV
RIGGING MASS SUPPLY BOX

15-49. Description of Load

Two mass supply boxes are rigged for low-velocity airdrop on a 16-foot, type V airdrop platform. Loads may include any bulk items of general supply that can be packed into the box without shifting of the load. FM 10-500-2/TO 13C7-1-5 shows weight limitations and parachute requirements.

15-50. Preparing Platform

Prepare a 16-foot, type V airdrop platform as described below.

a. Inspecting Platform. Inspect, or assemble and inspect, the 16-foot, type V airdrop platform

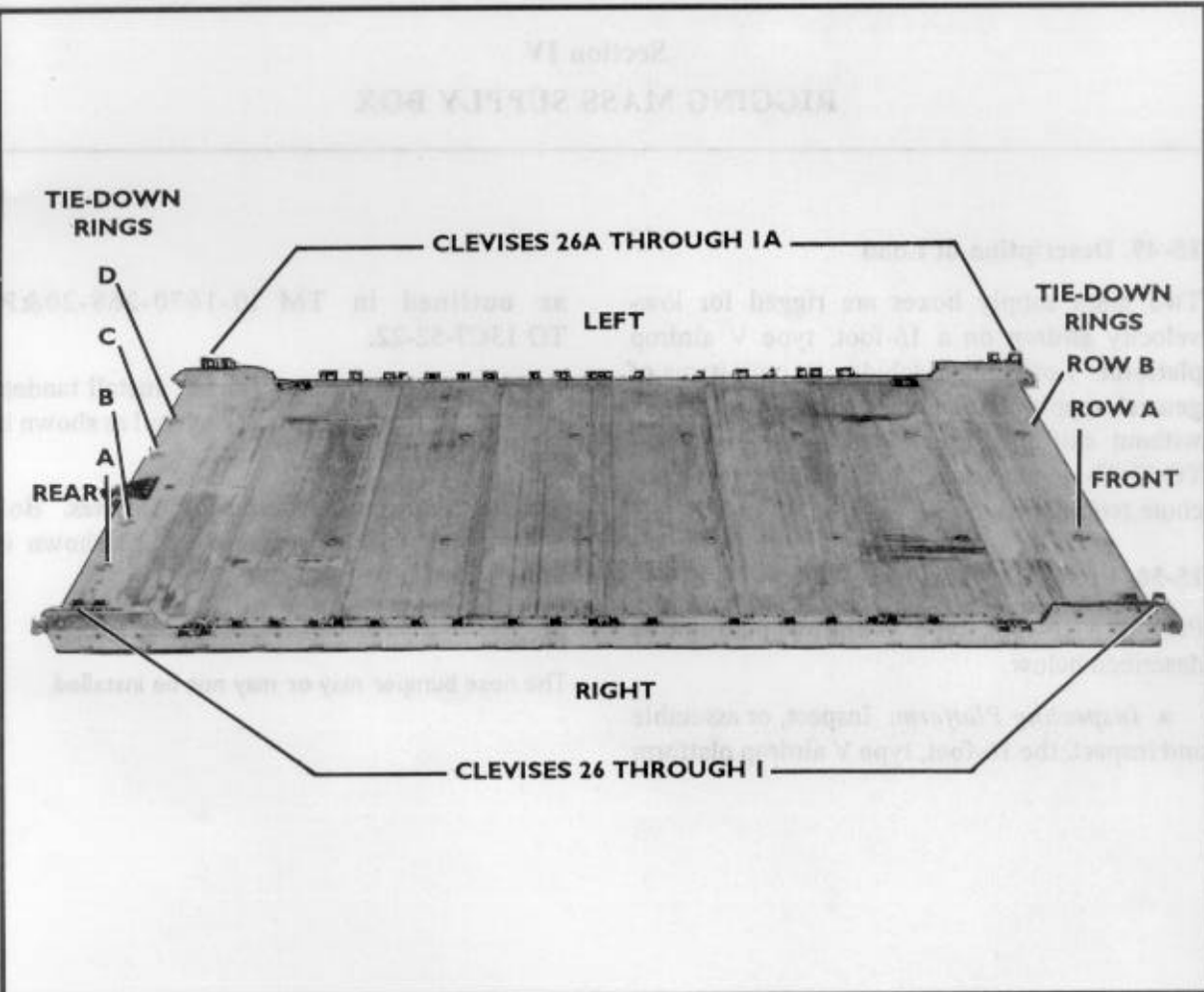
as outlined in TM 10-1670-268-20&P/TO 13C7-52-22.

b. Installing Tandem Links. Install tandem links on the front and rear of each rail as shown in Figure 15-41.

c. Installing and Numbering Clevises. Bolt and number 56 clevis assemblies as shown in Figure 15-41.

Note:

The nose bumper may or may not be installed.



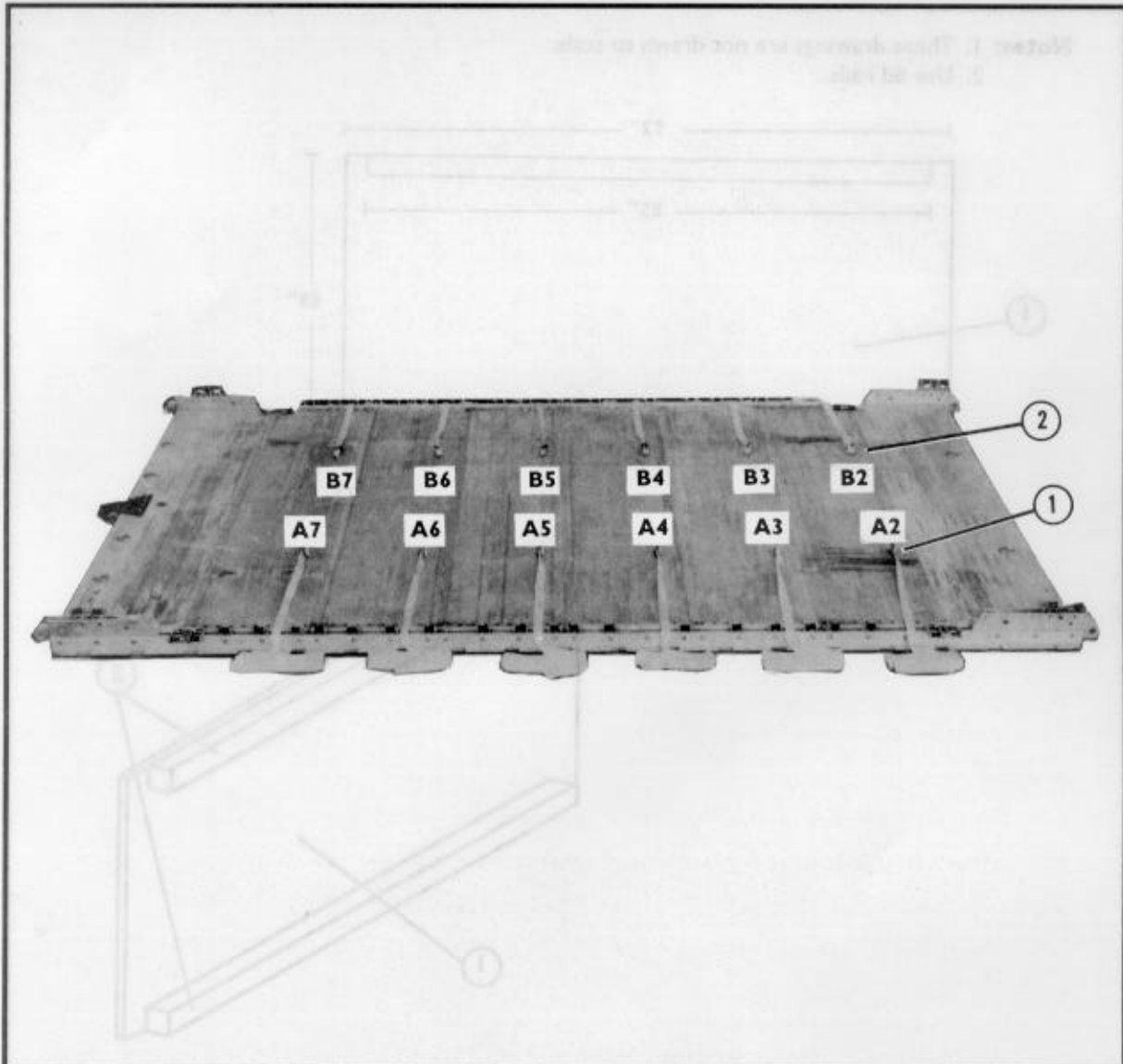
Step:

1. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
2. Install a tandem link on the rear of each platform side rail using holes 30, 31, and 32.
3. Install clevises on bushings 1 and 2 of each front tandem link.
4. Install clevises on bushings 2 and 3 of each rear tandem link.
5. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 5, 7, 8, 9, 10, 11, 13, 15, 16, 17, 18, 19, 21, 22, 23, 24, 25, 26, 27, and 28. Reverse the clevises on holes 5 and 28. Install two clevises on each of the reversed clevises.
6. Starting at the front of the platform, number the clevises bolted to the right side from I through 26, and those bolted to the left side from 1A through 26A.
7. Label the tie-down rings according to FM 10-500-2/TO 13C7-1-5.

Figure 15-41. Platform prepared

15-51. Placing Lashings on Platform

Pre-position twelve 15-foot lashings through the tie-down rings on the platform as shown in Figure 15-42.



- ① Pass the end of a 15-foot lashing through tie-down ring A2 and through its own D-ring. Pass the free end over the right rail. Repeat for tie-down rings A3, A4, A5, A6, and A7.
- ② Pass the end of a 15-foot lashing through tie-down ring B2 and through its own D-ring. Pass the free end over the left rail. Repeat for tie-down rings B3, B4, B5, B6, and B7.

Figure 15-42. Lashings pre-positioned on platform

15-52. Constructing and Forming Storage Box Components

Construct the components of the storage boxes as shown in Figures 15-43, 15-44, and 15-45.

Partially assemble the first box for loading as shown in Figure 15-46.

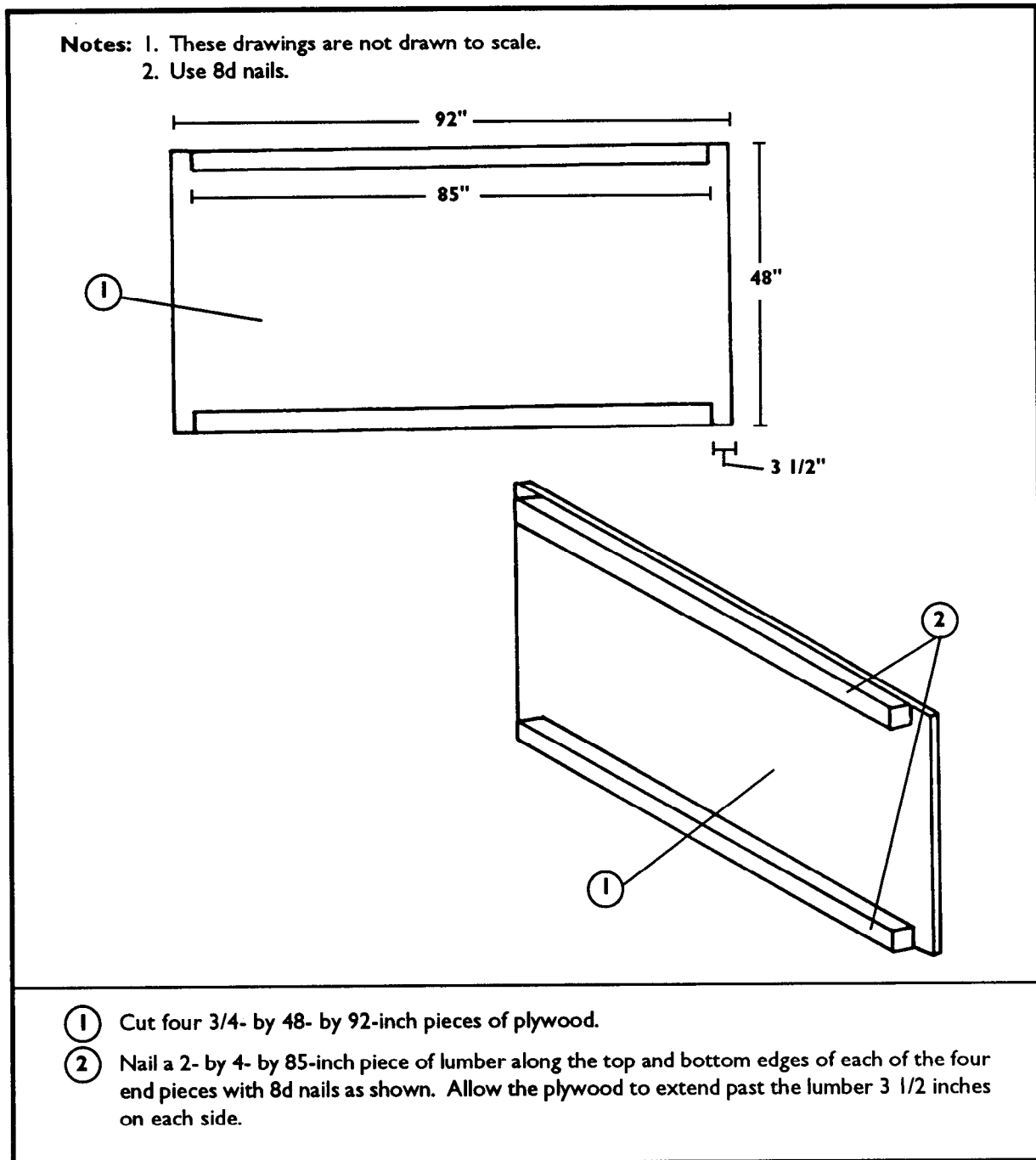
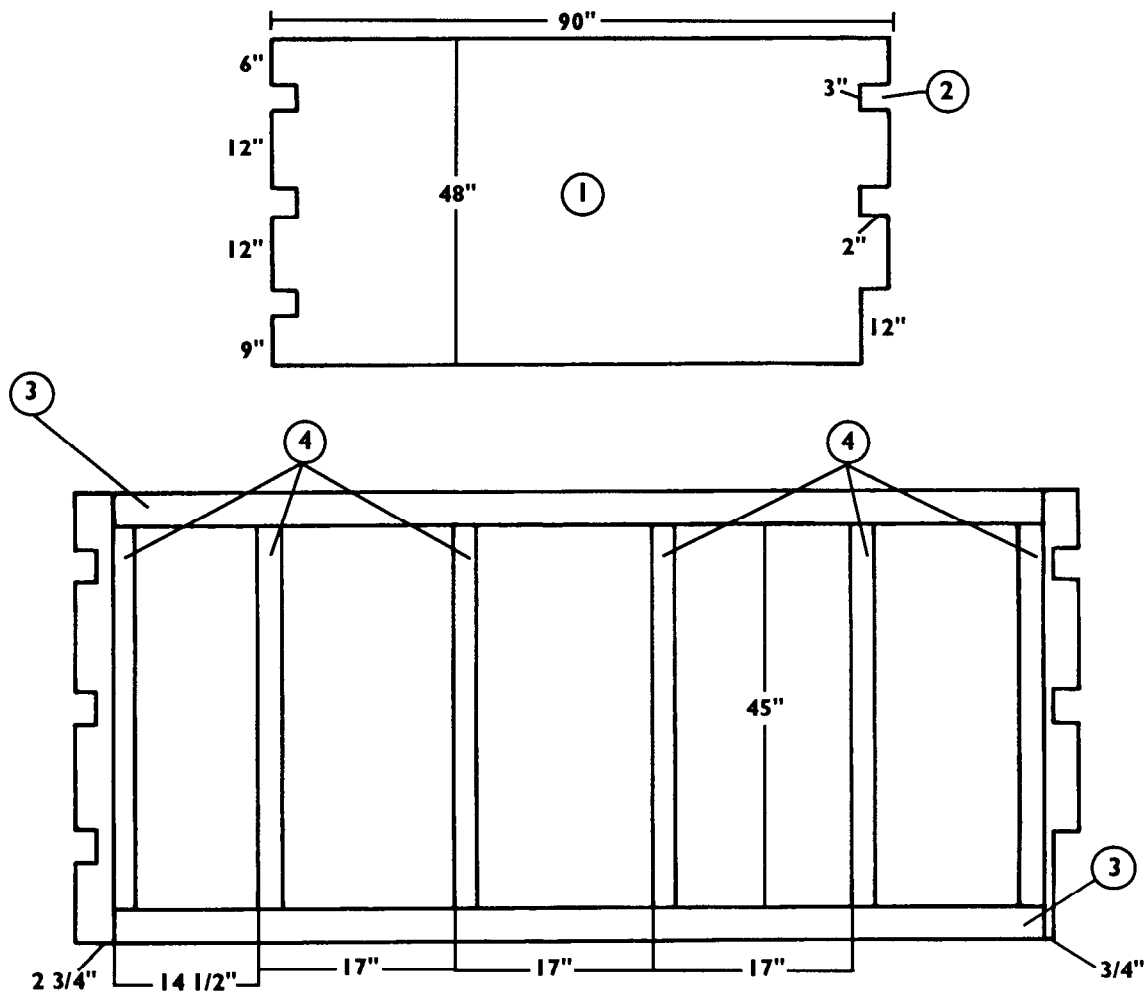


Figure 15-43. Box ends constructed

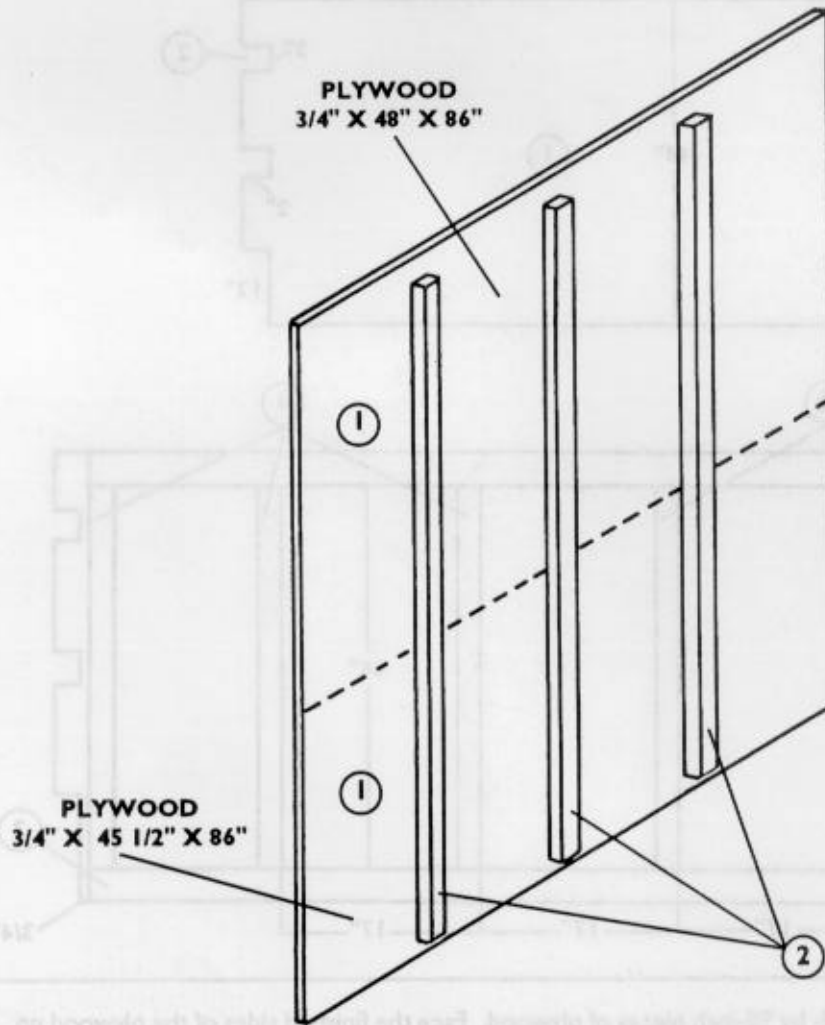
- Notes:** 1. These drawings are not drawn to scale.
2. Use 8d nails.



- ① Cut four 3/4- by 48- by 90-inch pieces of plywood. Face the finished sides of the plywood up.
- ② Make 2- by 3-inch cutouts as shown in each of the four sides. Face the 12-inch cutout to the right on two pieces, and to the left on the other two.
- ③ Nail a 2- by 4- by 84 1/2-inch piece of lumber on edge along the top and bottom interior edges of each of the four sides with 8d nails. Allow the plywood to extend past the lumber 2 3/4 inches on each end at the top. Overhang at the bottom is 2 3/4 inches at the small-notched end and 3/4 inches at the larger notched end.
- ④ Cut six pieces of 2- by 4- by 45-inch lumber for each of the four sides. Nail a piece of this lumber between each of the pieces of lumber placed in step 3 flush with the ends. Space the four remaining pieces as shown and nail them in place.

Figure 15-44. Box sides constructed

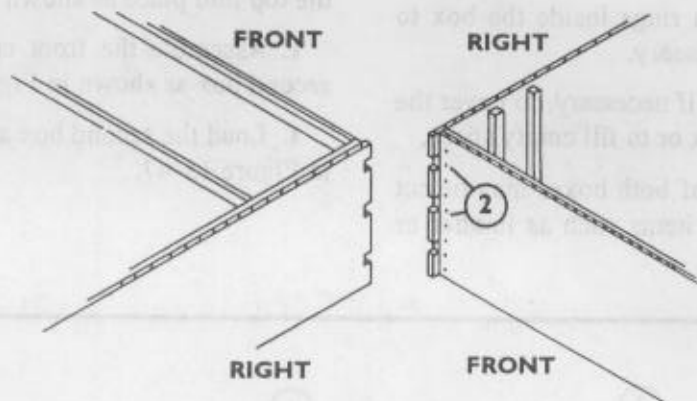
- Notes:** 1. This drawing is not drawn to scale.
2. Use 8d nails.



- ① Cut a full sheet of 3/4-inch plywood to 48 by 86 inches. Cut a second sheet to 45 1/2 by 86 inches. Lay them side-by-side to make a piece 86 by 93 1/2 inches.
- ② Space three 2- by 4- by 85-inch pieces of lumber evenly across the two pieces of plywood. Allow 4 1/4 inches of plywood to overhang on each end of the lumber. Nail the lumber and the plywood together.
- ③ Repeat steps 1 and 2 above to make the top for the second box (not shown).

Figure 15-45. Tops of boxes constructed

- Notes:** 1. These drawings are not drawn to scale.
2. Use 8d nails.



- ① Assemble the box on the platform. Fit each end of the box between the sides with the left and right of each end flush against the inside vertical lumber uprights on the sides.
- ② Nail the pieces together with 8d nails through the front side of the box end.
- ③ Be sure that the front box is centered on the platform and that the front edges of the sides of the box are even with the front edge of the platform (not shown).

Figure 15-46. Box partially assembled for loading

15-53. Loading and Closing the Boxes

Load and close the boxes as described below.

a. Use the tie-down rings inside the box to secure the load, if necessary.

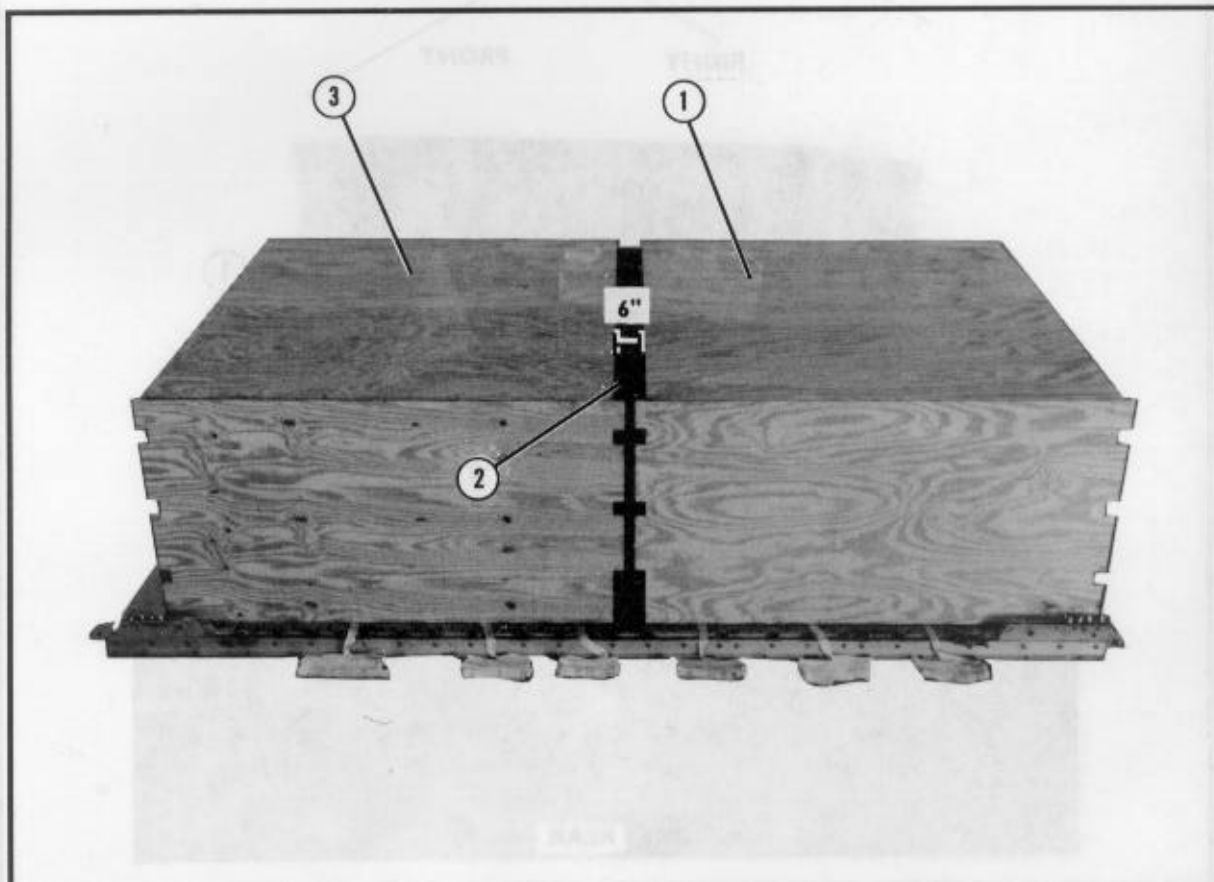
b. Use honeycomb, if necessary, to cover the platform inside the box or to fill empty space.

c. The inside ends of both boxes may be cut out to allow for long items such as lumber or tent poles.

d. Load the front box. Nail the inside end and the top into place as shown in Figure 15-47.

e. Assemble the front end and sides of the second box as shown in Figure 15-46.

f. Load the second box and close it as shown in Figure 15-47.



- ① After loading the front box, nail the rear end of the box in place. Align the top with the lumber facing down. Nail the top in place along the edges.
- ② Partially assemble the rear box for loading. Place the front end of the box 6 inches from the rear end of the front box.
- ③ Close the rear box as in step 1.

Figure 15-47. Boxes closed

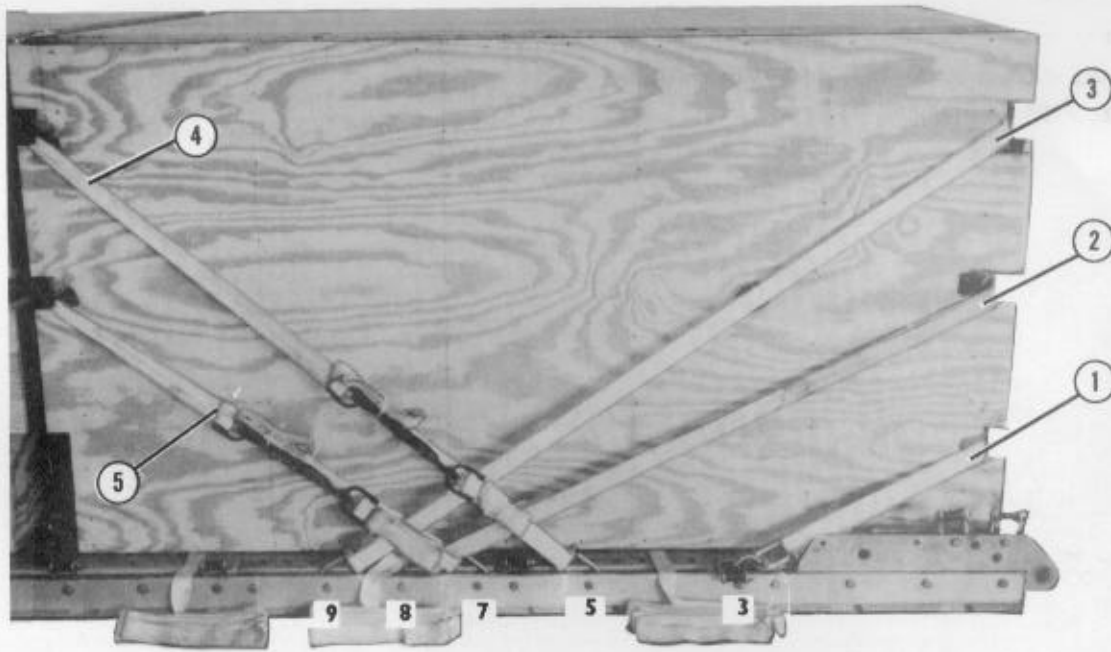
15-54. Installing Lashings

Install the lashings and secure pre-positioned lashings for the boxes as shown in Figures 15-48 through 15-57.

Notes:

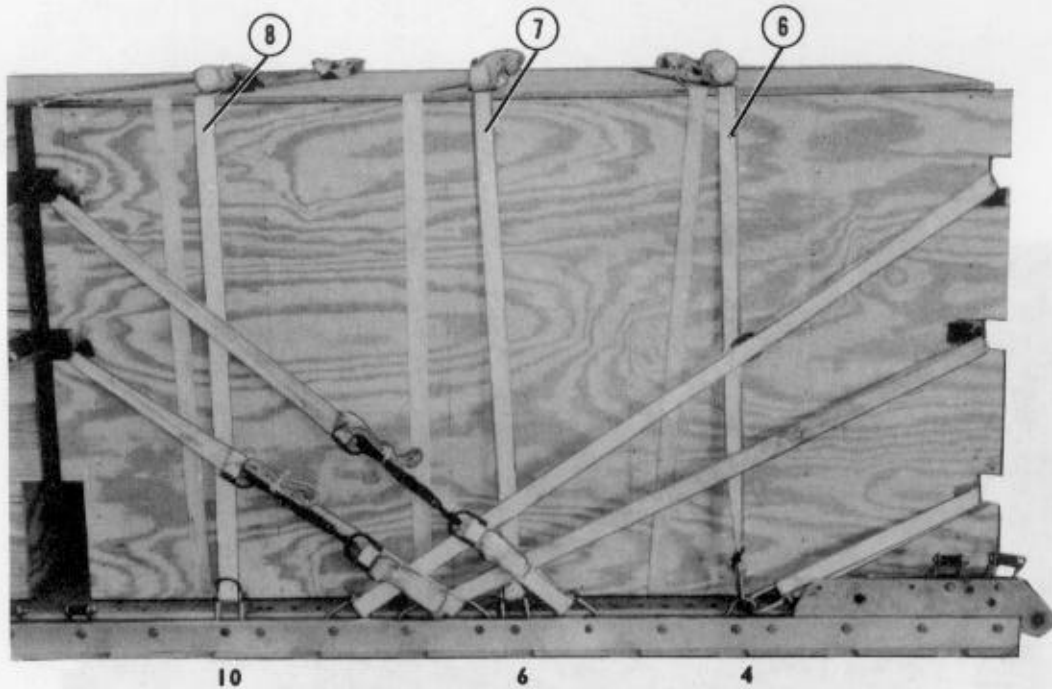
1. Pad the cutouts in the box sides with cellulose wadding. Tape the wadding in place.

2. This load requires lashings over 30 feet in length. Lashings must be positioned through clevises before sections are joined together.



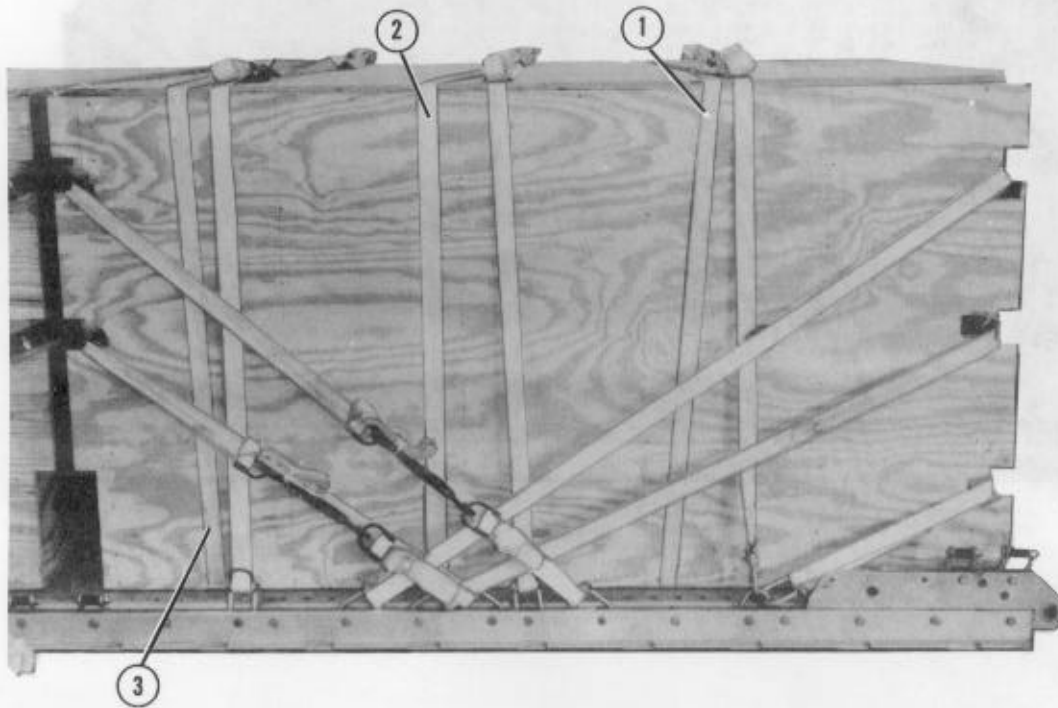
Lashing Number	Tie-Down Clevis Number	Instructions
1	3 and 3A	Pass a 30-foot lashing through both clevises and through the bottom front cutouts. Secure the lashing in the front.
2	8 and 8A	Pass a 45-foot lashing through both clevises and through the middle front cutouts. Secure the lashing in the front.
3	9 and 9A	Pass a 45-foot lashing through both clevises and through the upper front cutouts. Secure the lashing in the front.
4	5 and 5A	Pass a 45-foot lashing through both clevises and through the top rear cutouts. Secure the lashing on the side.
5	7 and 7A	Pass a 45-foot lashing through both clevises and through the bottom rear cutouts. Secure the lashing on the side.

Figure 15-48. Lashings 1 through 5 installed



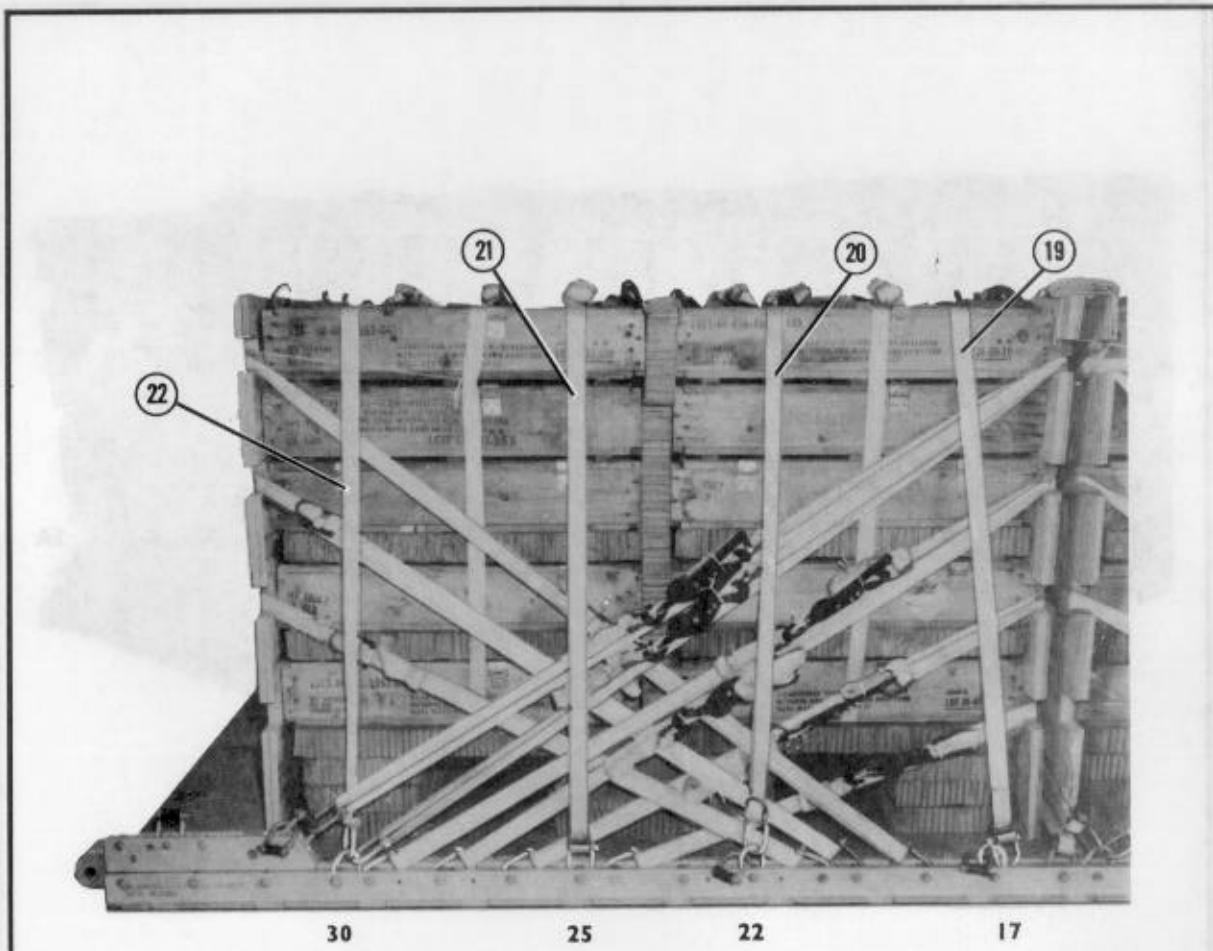
Lashing Number	Tie-Down Clevis Number	Instructions
6	4 and 4A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.
7	6 and 6A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.
8	10 and 10A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.

Figure 15-49. Lashings 6 through 8 installed



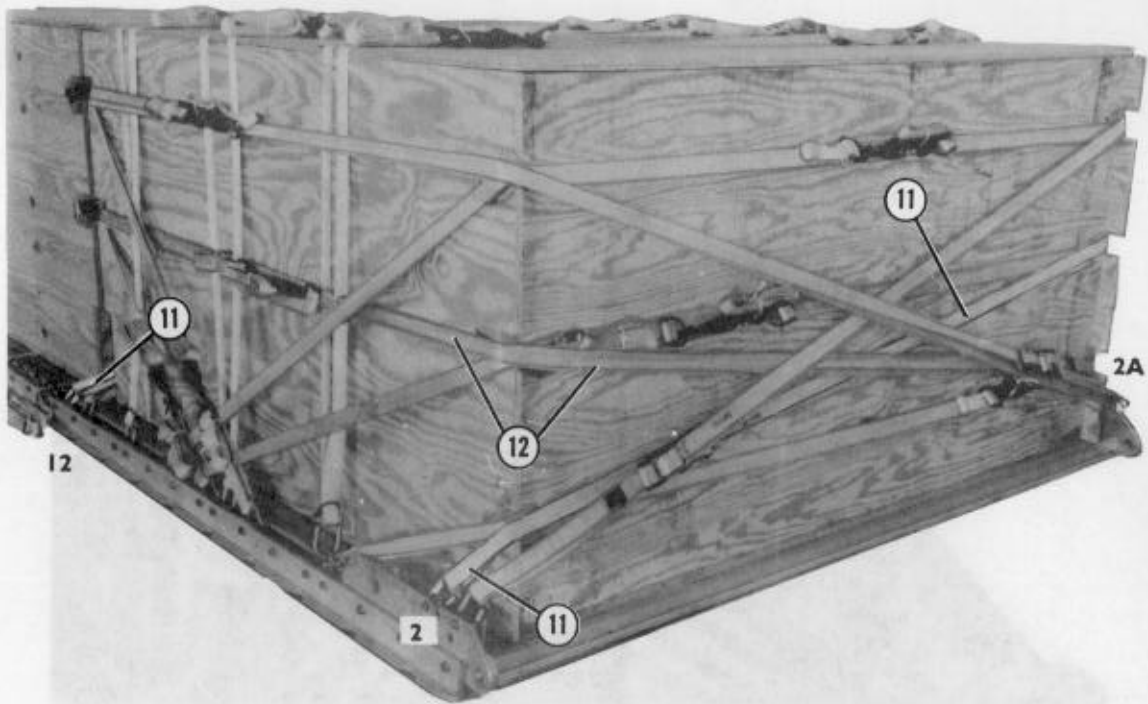
- ① Pass the ends of the pre-positioned lashings in tie-down rings A2 and B2 to the top of the load. Secure the lashings on top of the load.
- ② Secure the pre-positioned lashings in tie-down rings A3 and B3 in the same way.
- ③ Secure the pre-positioned lashings in tie-down rings A4 and B4 in the same way.

Figure 15-50. Pre-positioned lashings secured



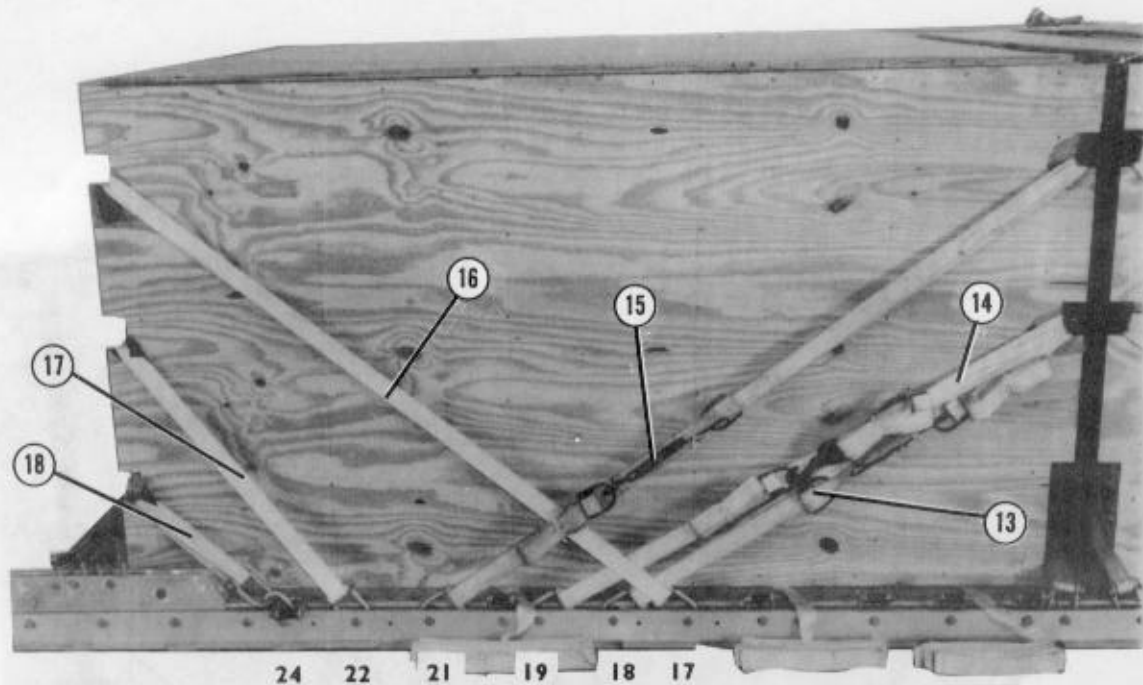
Lashing Number	Tie-Down Clevis Number	Instructions
9	I and II	Pass a 60-foot lashing through clevis I, through the top cutout in the left side of the first box, and around the left side of the box. Pass the lashing through the top left cutout on the rear end of the first box and through clevis II. Secure the lashing on the left side.
10	IA and IIA	Pass a 60-foot lashing through clevis IA, through the top cutout in the right side of the first box, and around the right side of the box. Pass the lashing through the top right cutout on the rear end of the first box and through clevis IIA. Secure the lashing on the right side.

Figure 15-51. Lashings 9 and 10 installed



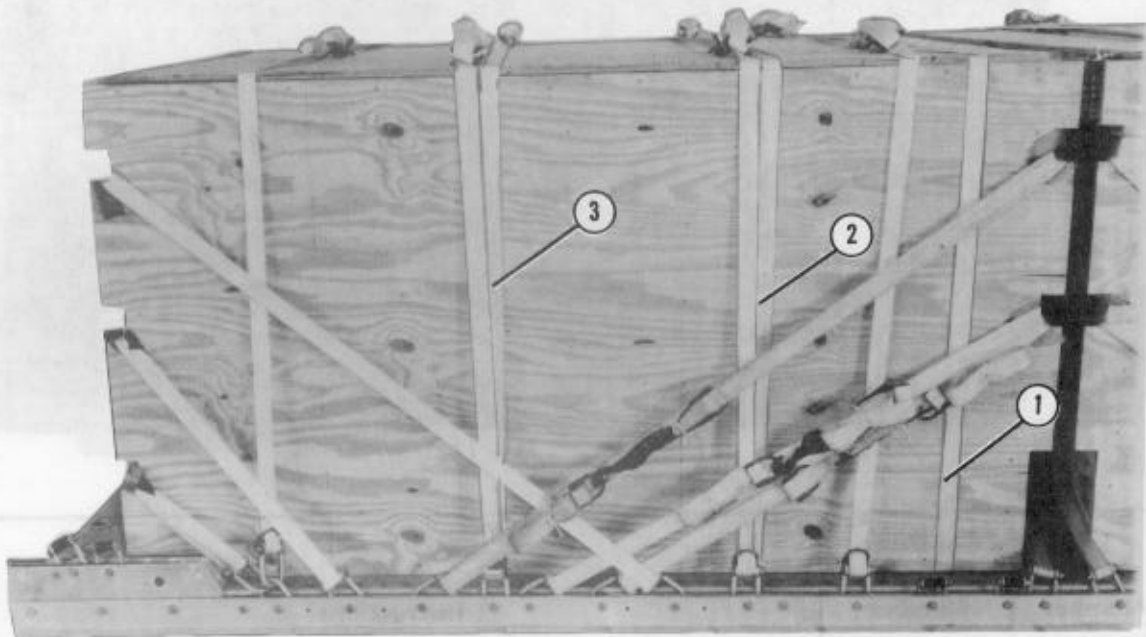
Lashing Number	Tie-Down Clevis Number	Instructions
11	2 and 12	Pass a 60-foot lashing through clevis 2, through the bottom right and middle left cutouts in the front of the first box, and around the left side of the box. Pass the lashing through the middle left cutout on the rear end of the first box and through clevis 12. Secure the lashing on the left side.
12	2A and 12A	Pass a 60-foot lashing through clevis 2A, through the bottom left and middle right cutouts in the front of the first box, and around the right side of the box. Pass the lashing through the middle right cutout on the rear end of the first box and through clevis 12A. Secure the lashing on the right side.

Figure 15-52. Lashings 11 and 12 installed



Lashing Number	Tie-Down Clevis Number	Instructions
13	18 and 18A	Pass a 30-foot lashing through both clevises and through the middle cutouts on the front of the second box. Secure the lashing on the side.
14	19 and 19A	Pass a 30-foot lashing through both clevises. Route it and secure it as in lashing 13.
15	21 and 21A	Pass a 45-foot lashing through both clevises and through the top cutouts on the front of the second box. Secure the lashing on the side.
16	17 and 17A	Pass a 45-foot lashing through both clevises and through the top rear cutouts. Secure the lashing in the rear.
17	22 and 22A	Pass a 30-foot lashing through both clevises and through the middle rear cutouts. Secure the lashing in the rear.
18	24 and 24A	Pass a 30-foot lashing through both clevises and through the bottom rear cutouts. Secure the lashing in the rear.

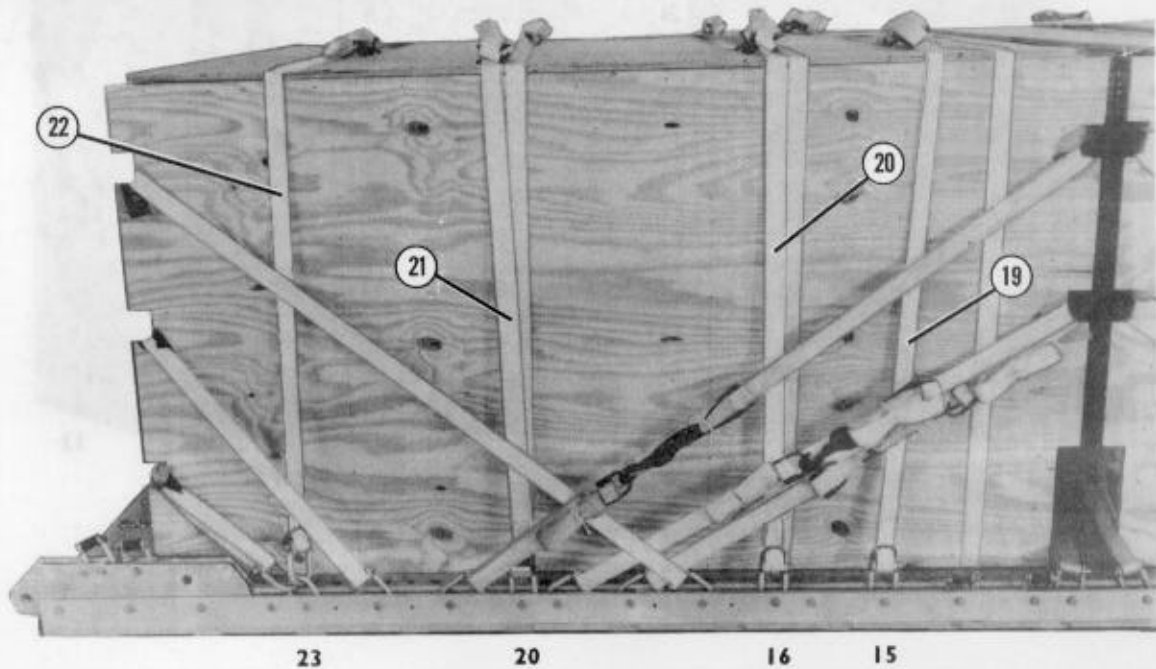
Figure 15-53. Lashings 13 through 18 installed



Pass a 30-foot lashing through both cleaves and through the middle cleave on the front of the second box. Secure the lashing on the side.	18 in 18A	13
Pass a 30-foot lashing through both cleaves. Route it and secure it as in lashing 13.	18 in 18A	14
Pass a 45-foot lashing through both cleaves and through the top cleave on the front of the second box. Secure the lashing on the side.	12 in 17A	15
Pass a 45-foot lashing through both cleaves and through the top cleave	12 in 17A	16

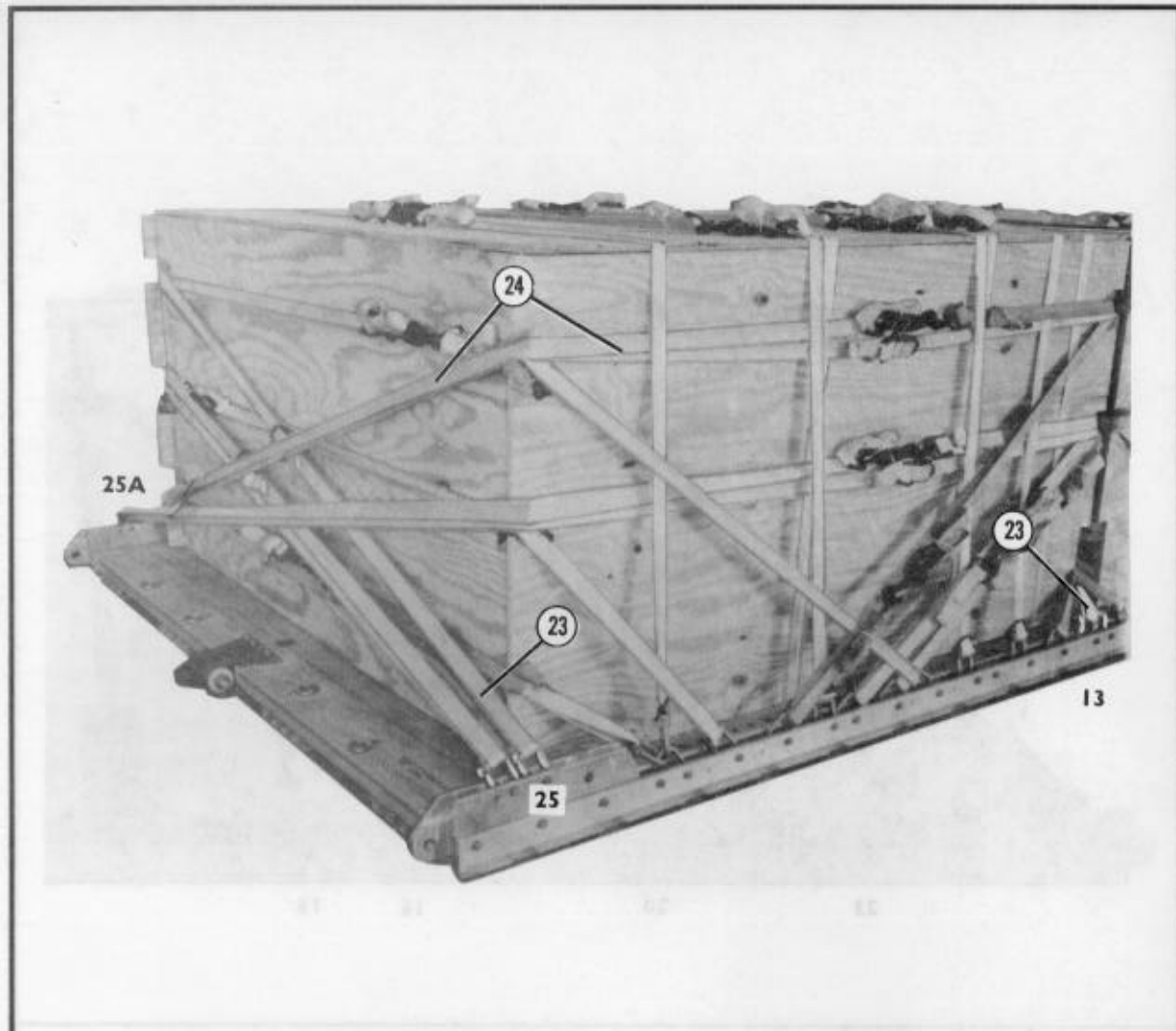
- ① Pass the ends of the pre-positioned lashings in tie-down rings A5 and B5 to the top of the load. Secure the lashings on top of the load.
- ② Secure the pre-positioned lashings in tie-down rings A6 and B6 in the same way.
- ③ Secure the pre-positioned lashings in tie-down rings A7 and B7 in the same way.

Figure 15-54. Pre-positioned lashings secured



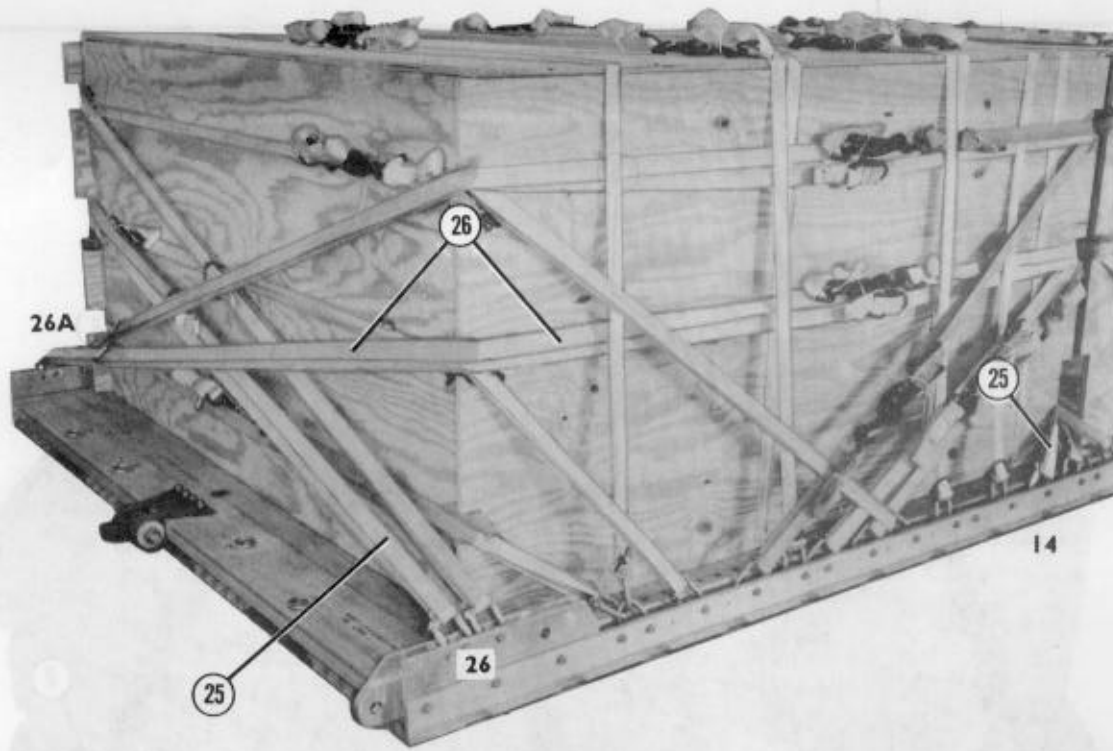
Lashing Number	Tie-Down Clevis Number	Instructions
19	15 and 15A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.
20	16 and 16A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.
21	20 and 20A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashings on top of the box.
22	23 and 23A	Pass a 15-foot lashing through each clevis and through its own D-ring. Secure the lashing on top of the box.

Figure 15-55. Lashings 19 through 22 installed



Lashing Number	Tie-Down Clevis Number	Instructions
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.
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.

Figure 15-56. Lashings 23 and 24 installed

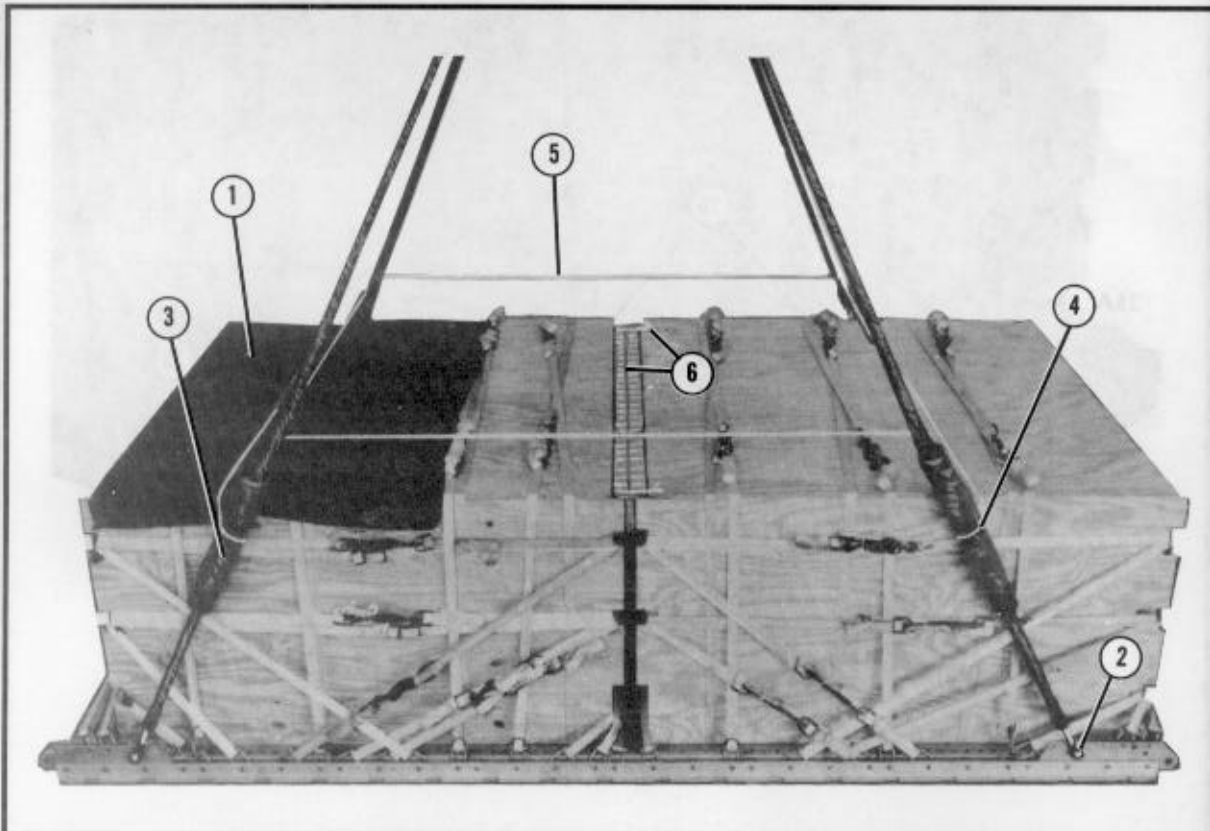


Lashing Number	Tie-Down Clevis Number	Instructions
25	14 and 26	Pass a 60-foot lashing through clevis 14, through the middle cutout in the left side of the second box, and around the left side of the box. Pass the lashing through the left middle cutout on the rear side of the second box and through clevis 26. Secure the lashing on the left side.
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.

Figure 15-57. Lashings 25 and 26 installed

15-55. Installing Load Cover, Suspension Slings, and Deadman's Tie

Install the load cover, suspension slings, and deadman's tie as shown in Figure 15-58.



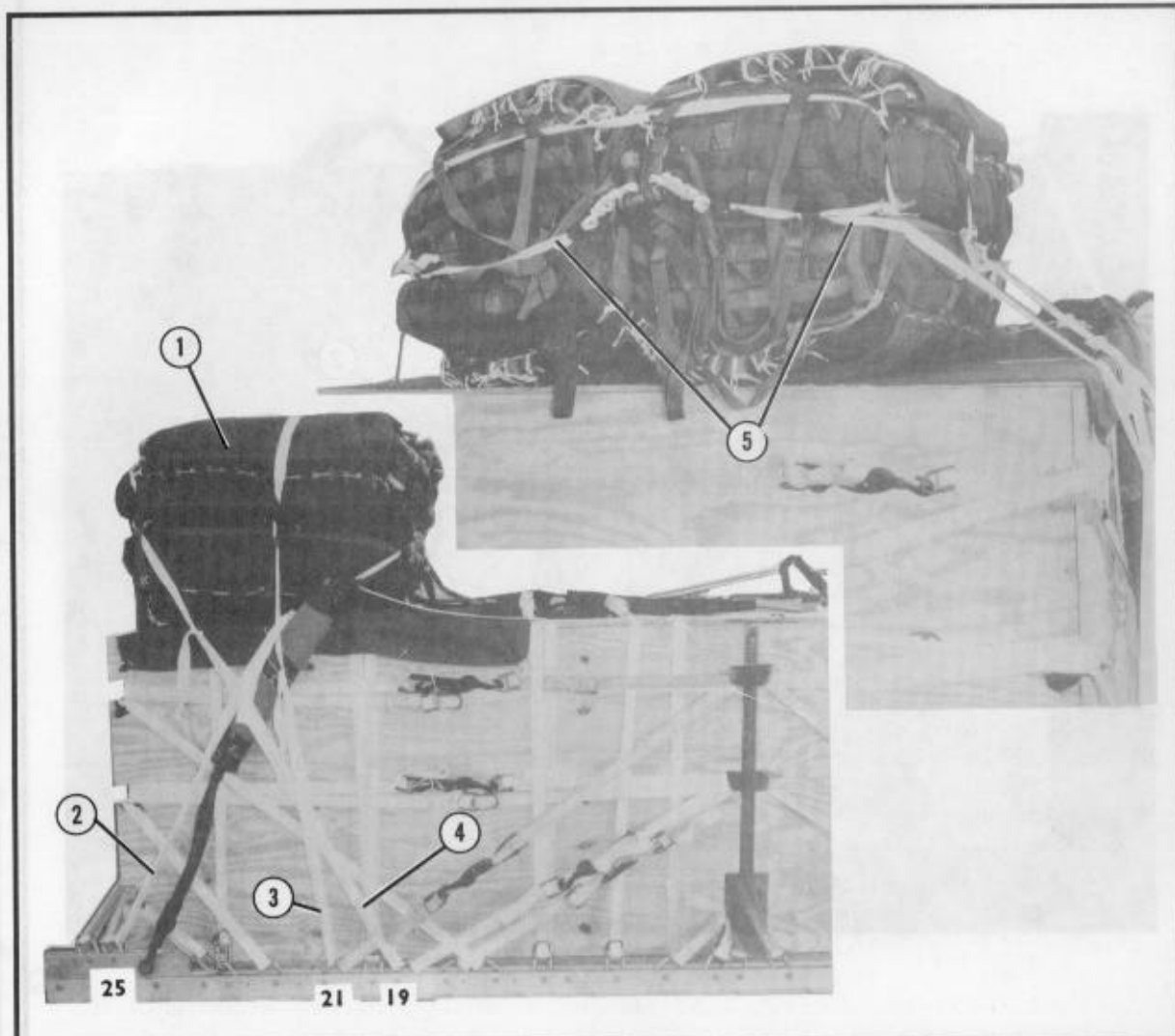
- ① Cover the rear third of the load with a 60- by 96-inch piece of cotton duck cloth. Secure the cloth to adjacent lashings with type III nylon cord.
- ② Attach a 16-foot (4-loop), type XXVI nylon webbing sling to each tandem link with a large suspension clevis.
- ③ Pull the suspension slings tight above the load. Pad each suspension sling 36 inches above the clevis with a 9- by 24-inch piece of felt. Tape the felt in place 2 inches past each end of the felt, and in the center.
- ④ Tie the front suspension slings together over the top of the load with a length of type III nylon cord. Tie the rear suspension slings in the same way.
- ⑤ Install the deadman's tie according to FM 10-500-2/TO 13C7-1-5.
- ⑥ 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 and holes drilled in the plywood.

Figure 15-58. Load cover, suspension slings, and deadman's tie installed

15-56. Installing Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for the number of cargo parachutes required for the weight of the load. Four G-11B cargo parachutes are shown

here. Install the cargo parachutes according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-59.

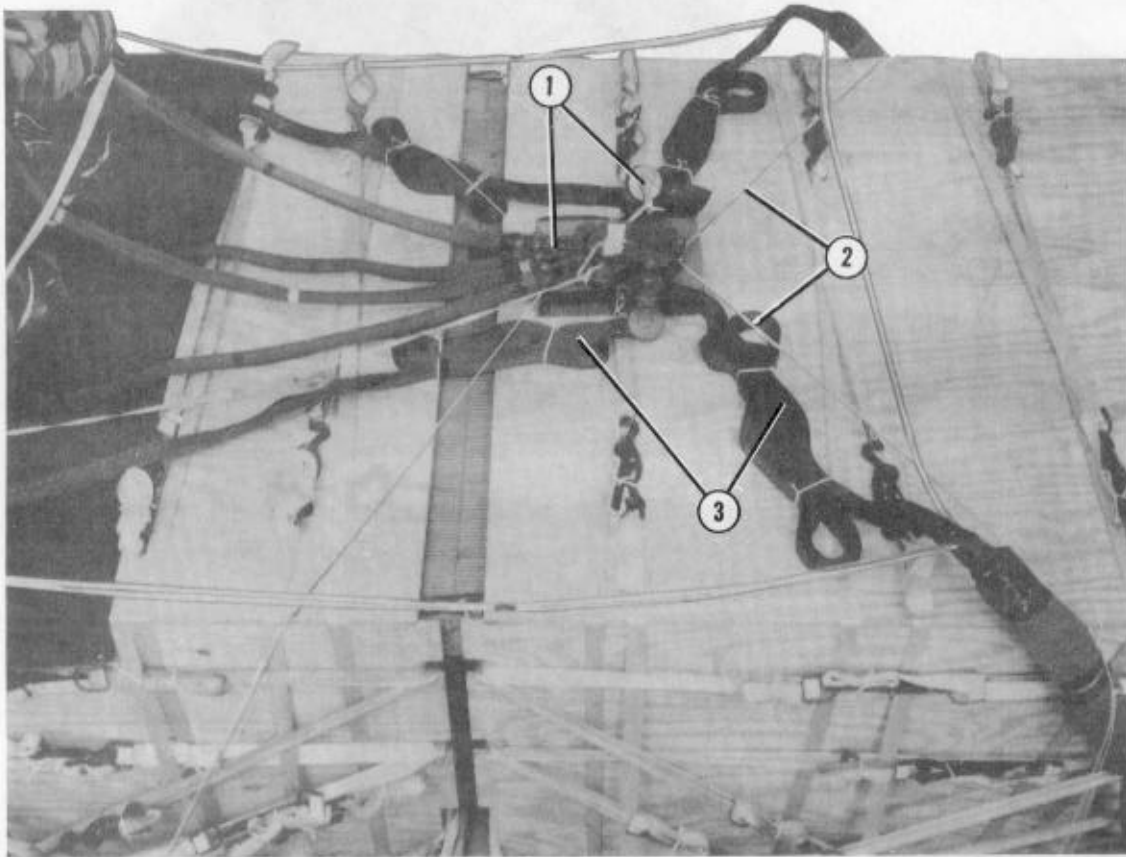


- ① Install the cargo parachutes at the rear of the load.
- ② Tie the front parachute restraint strap to clevises 25 and 25A.
- ③ Tie the center parachute restraint strap to clevises 21 and 21A.
- ④ Tie the rear parachute restraint strap to clevises 19 and 19A.
- ⑤ Install two multicut parachute release straps.

Figure 15-59. Four G-11B cargo parachutes installed

15-57. Installing Release System

Install and safety an M-2 cargo parachute release assembly as shown in Figure 15-60.

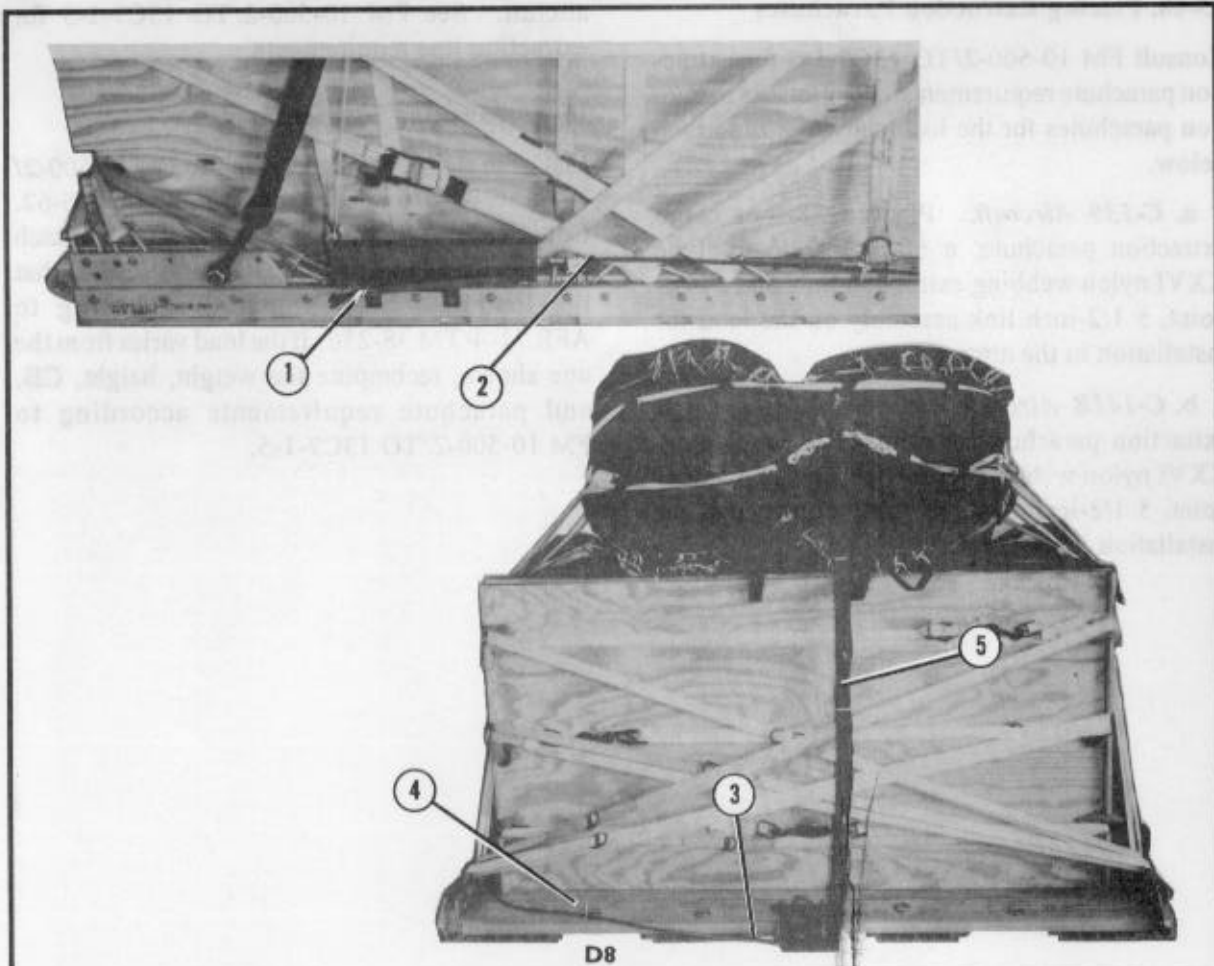


- ① Prepare and install an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Place the release assembly on a 10- by 12-inch piece of honeycomb in front of the parachutes as shown.
- ② Safety the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie the slack in the suspension slings with type I, 1/4-inch cotton webbing.

Figure 15-60. Release assembly installed

15-58. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-61.



- ① Install the EFTA actuator brackets to the front mounting holes on the left platform side rail.
- ② Attach a 16-foot release cable to the actuator. Install the actuator to the brackets and run the cable to the rear.
- ③ Install the latch assembly to the extraction bracket. Attach the release cable to the latch assembly.
- ④ Tie the cable to tie-down ring D8 with type I, 1/4-inch cotton webbing.
- ⑤ Install a 12-foot (2-loop), type XXVI nylon webbing sling as the deployment line. S-fold the slack and tape or tie the folds.

Figure 15-61. Extraction system installed

15-59. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints according to FM 10-500-2/TO 13C7-1-5.

15-60. Placing Extraction Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for extraction parachute requirements. Position the extraction parachutes for the load shown 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-141B 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.

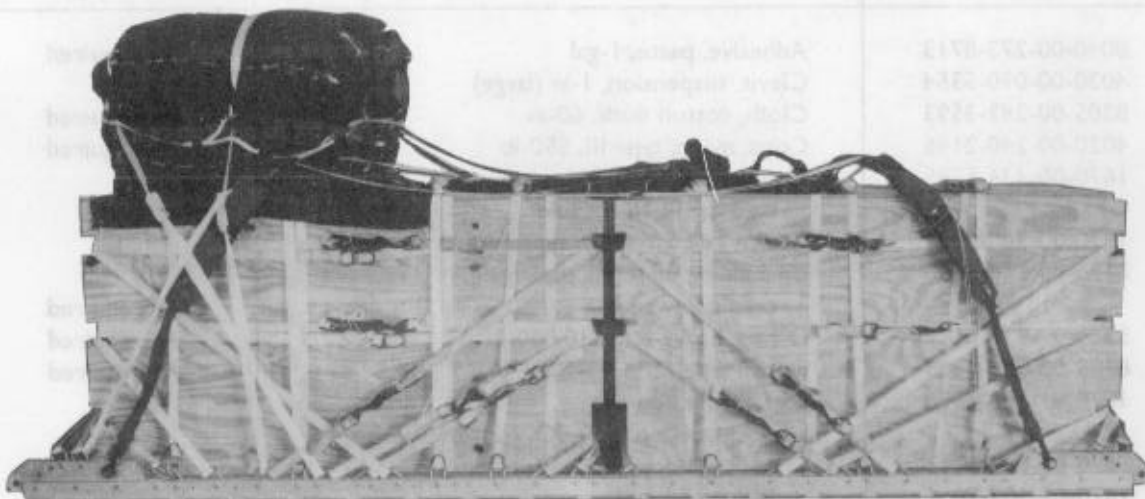
c. C-5 Aircraft. Place a 28-foot cargo extraction parachute and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

15-61. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 15-62. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load had been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, recompute the weight, height, CB, and parachute requirements according to FM 10-500-2/TO 13C7-1-5.

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.....	5,040 pounds
	Maximum load allowed.....	21,000 pounds
Height	.....	88 inches
Width	.....	108 inches
Length	.....	192 inches
Overhang:	Front.....	0 inches
	Rear.....	0 inches
CB (from front edge of platform)	.....	97 inches
Extraction System (adds 18 inches to length of platform)	.....	EFTC

Figure 15-62. Mass supply boxes rigged on a 16-foot, type V platform for low-velocity airdrop

15-62. Equipment Required

Use the equipment listed in Table 15-4 to rig the load shown.

Note:

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

Table 15-4. Equipment required for rigging mass supply boxes on a 16-foot type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
4030-00-090-5354	Clevis, suspension, 1-in (large)	5
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer w 16-ft cable	1
1670-00-360-0329	Cover, link assembly, type IV	12
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
8305-00-958-3685	Felt sheet, 1/2-in	As required
1670-01-183-2678	Leaf, extraction line	2
1670-01-062-6313	* Line, extraction, type XXVI nylon webbing: 60-ft (3-loop) or	1
1670-01-107-7651	140-ft (3-loop)	1
	Link assembly:	
	Two-point, 5 1/2-in:	1
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(2)
5310-00-232-5165	Nut, 1-in	(2)
1670-00-003-1954	Plate, side, 5 1/2-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV	9
5510-00-220-6146	Lumber, 2- by 4- by:	
	45-in	24
	84 1/2-in	8
	85-in	14
5315-00-010-4659	Nail, steel wire, common, 8d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	1 sheet
	5 1/2- by 92-in	2
	10- by 12-in	1
1670-01-016-7841	Parachute, cargo, G-11B	4

* Both extraction lines may be needed for C-5 aircraft.

Table 15-4. Equipment required for rigging mass supply boxes on a 16-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
1670-01-063-3715	Parachute, cargo extraction: 15-ft	1
1670-00-040-8135	28-ft	1
	Platform, AD, type V, 16-ft:	1
	Bracket:	
1670-01-162-2375	Inside EFTA	(1)
1670-01-162-2374	Outside EFTA	(1)
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis assembly (type V)	(54)
1670-01-162-2381	Tandem link (multipurpose)	(4)
5530-00-128-4981	Plywood, 3/4-in:	12 sheets
	45 1/2-in by 86-in	(2)
	48- by 86-in	(2)
	48- by 90-in	(4)
	48- by 92-in	(4)
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 suspension:	
1670-01-062-6308	16-ft (4-loop)	4
	For riser extension:	
1670-01-062-6302	20-ft (2-loop)	12
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, PSA, cloth back, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	86
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in, natural	As required
8305-00-263-3591	Type VIII	As required

CHAPTER 17

**RIGGING MASS SUPPLY BOX ON A 20-FOOT, TYPE V
PLATFORM FOR LOW-VELOCITY AIRDROP**

17-1. Description of Load

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 of the load. FM 10-500-2/TO 13C7-1-5 shows weight limitations and parachute requirements.

17-2. 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.

Note:

If the platform must be assembled, install the suspension links when assembling the platform. See Figure 17-1 for the location of the suspension links.

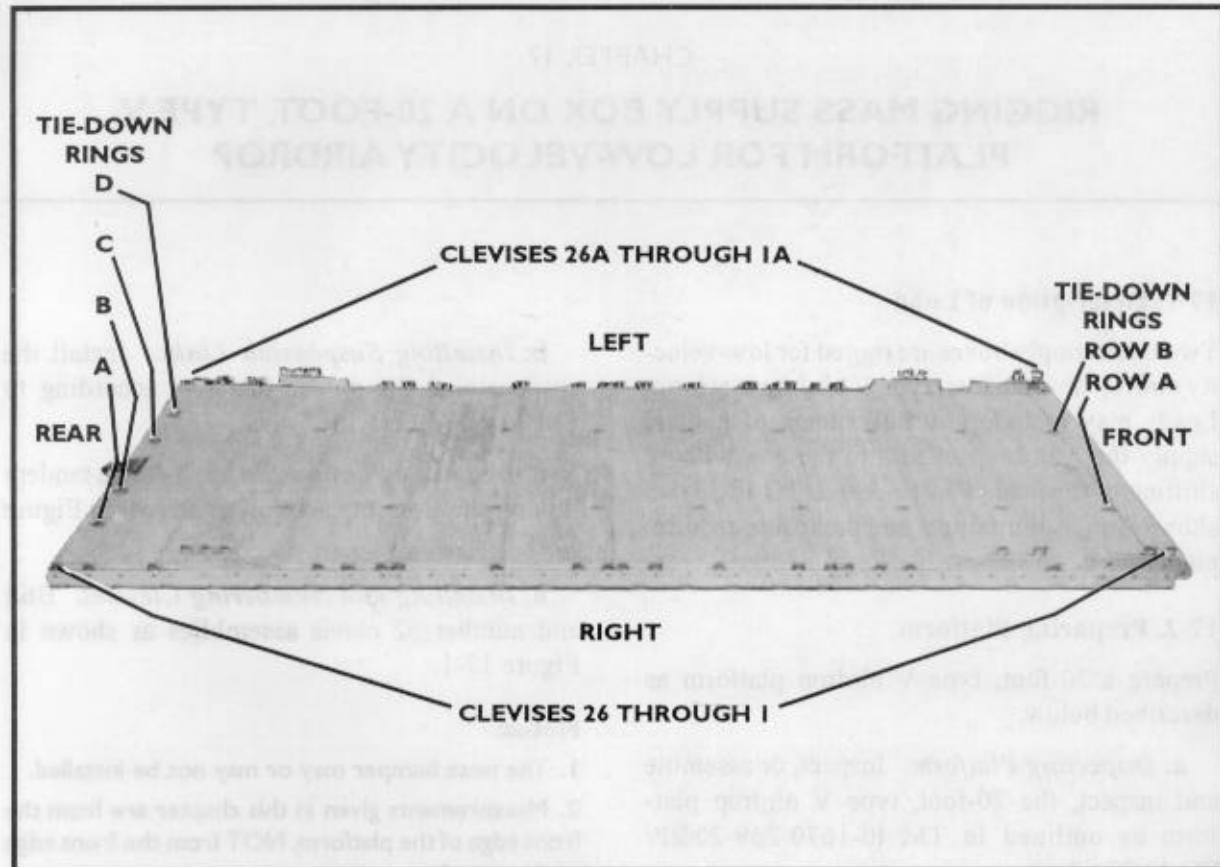
b. *Installing Suspension Links.* Install the suspension links on the platform according to FM 10-500-2/TO 13C7-1-5.

c. *Installing Tandem Links.* Install a tandem link on the front of each rail as shown in Figure 17-1.

d. *Installing and Numbering Clevises.* Bolt and number 52 clevis assemblies as shown in Figure 17-1.

Notes:

1. The nose bumper may or may not be installed.
2. 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 end of the link to the front of the rail.
2. Install a suspension link in holes 33, 34, and 35 on each platform side rail. Face the flat end of the link to the rear of the rail.
3. Install a tandem link on the front of each platform side rail using holes 1, 2, and 3.
4. Install clevises on bushings 1 and 2 on each front tandem link.
5. Install clevises on bushings 1 and 3 on the first suspension link on each side.
6. Install clevises on bushings 2, 3, and 4 on the second suspension link on each side.
7. Starting at the front of each platform side rail, install clevises on each platform side rail using the bushings bolted on holes 5, 10, 11, 12, 13, 14, 17, 19, 20, 21, 22, 25, 28, 29, 30, 31, 37, 39, and 40.
8. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 26 and those bolted to the left side from 1A through 26A.
9. Label the tie-down rings according to FM 10-500-2/O 13C7-1-5.

Figure 17-1. Platform prepared

17-3. Placing Lashings on Platform

Pre-position fourteen 15-foot lashings through the tie-down rings on the platform as shown in Figure 17-2.

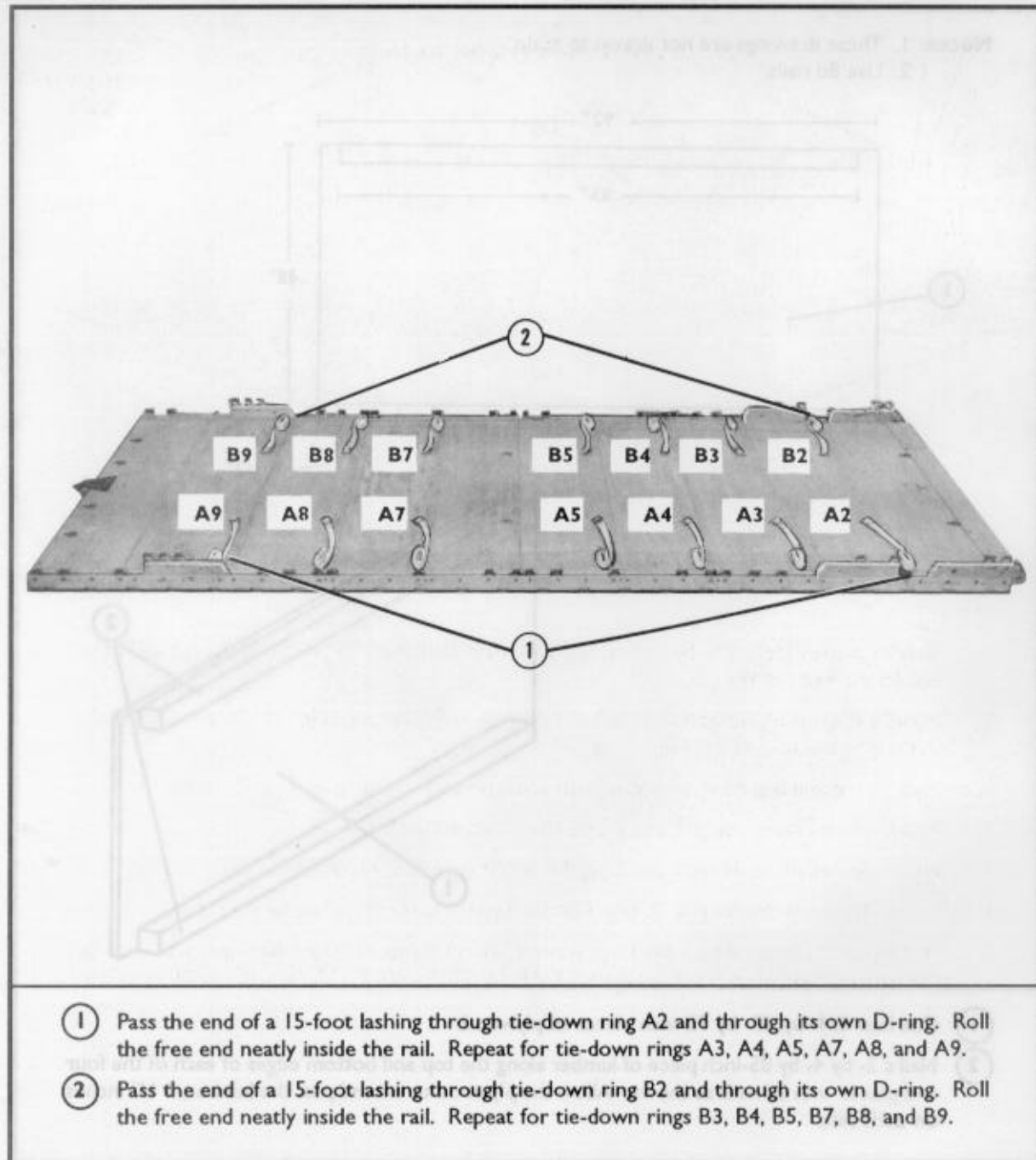


Figure 17-2. Lashings pre-positioned on platform

17-4. Constructing and Forming Storage Box Components

Construct the components of the storage boxes as shown in Figures 17-3, 17-4, and 17-5.

Partially assemble the first box for loading as shown in Figure 17-6.

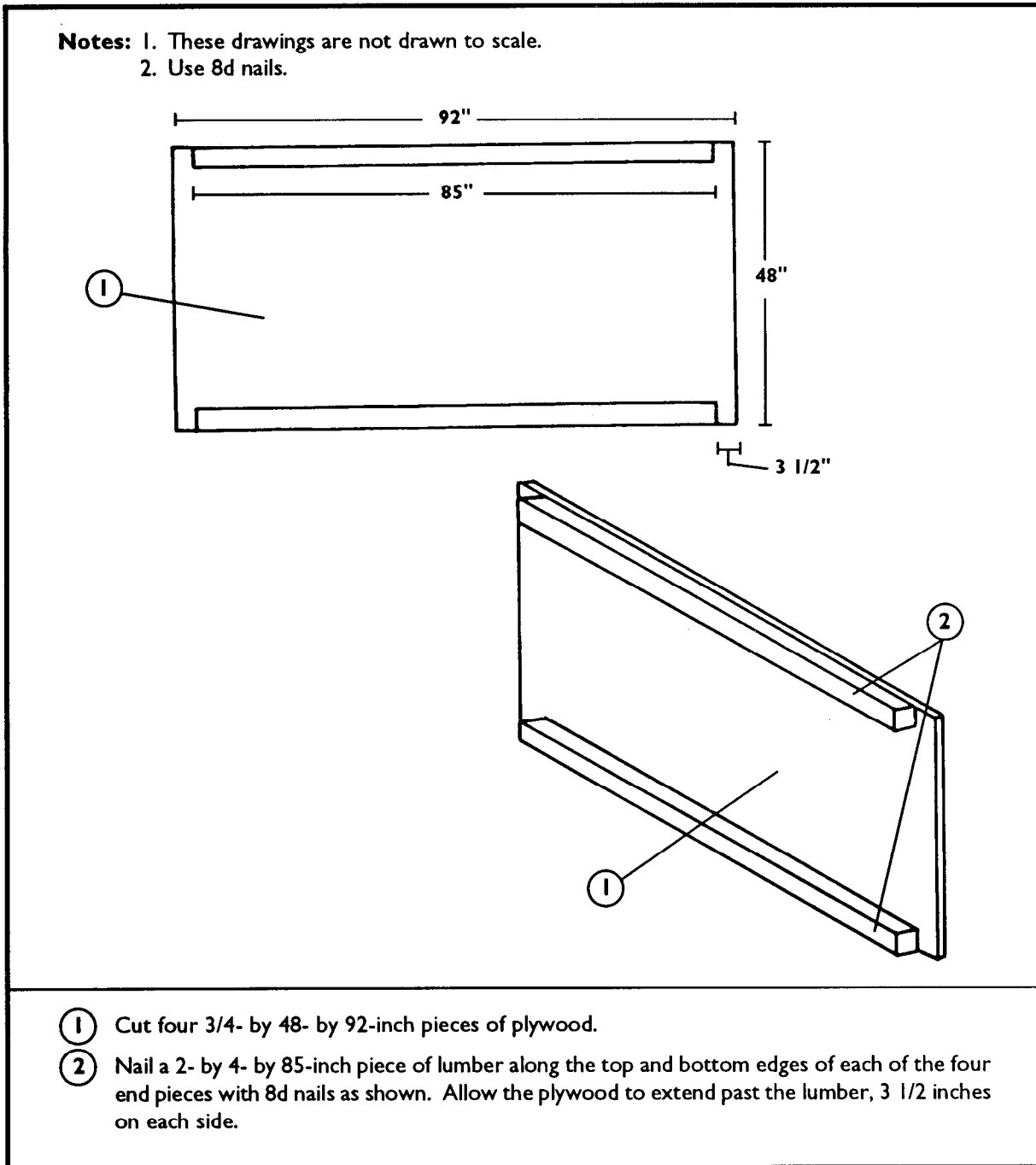
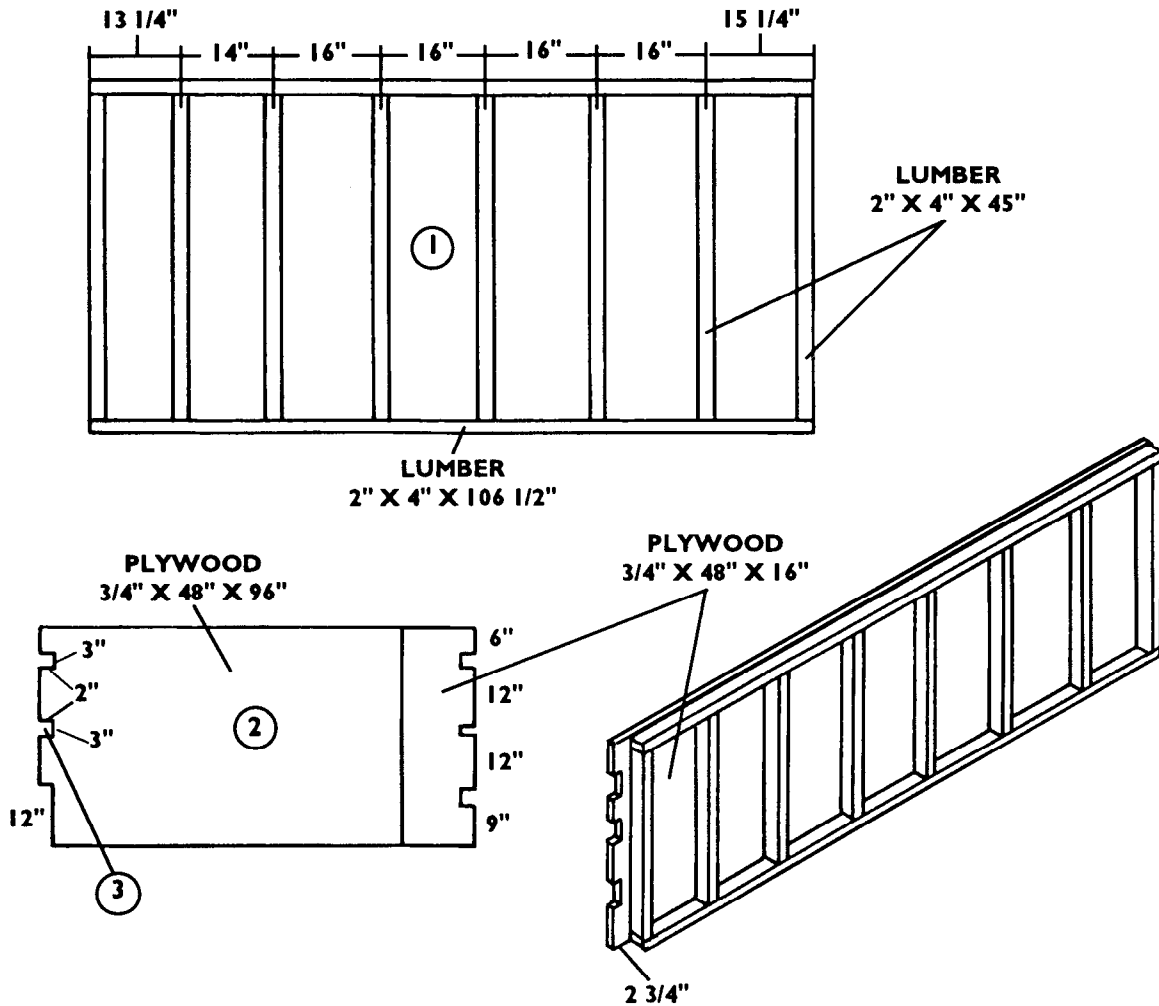


Figure 17-3. Box ends constructed

Notes: 1. These drawings are not drawn to scale.

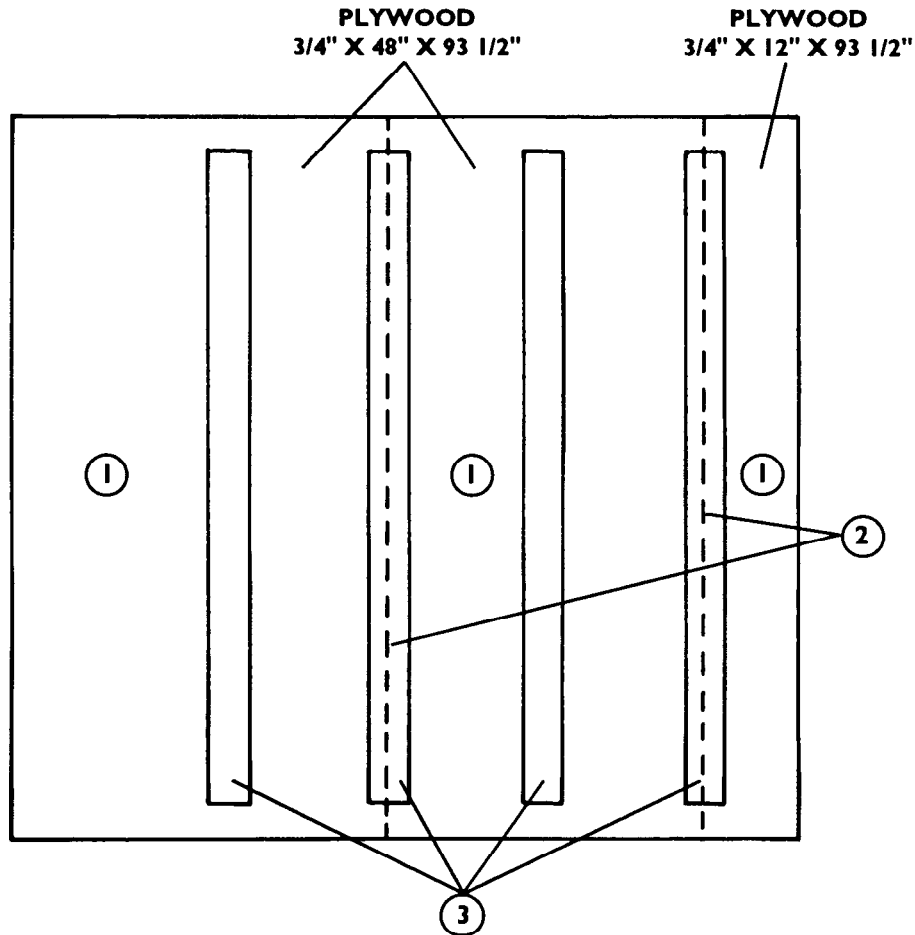
2. Use 8d nails.



- 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 from 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 17-4. Box sides constructed

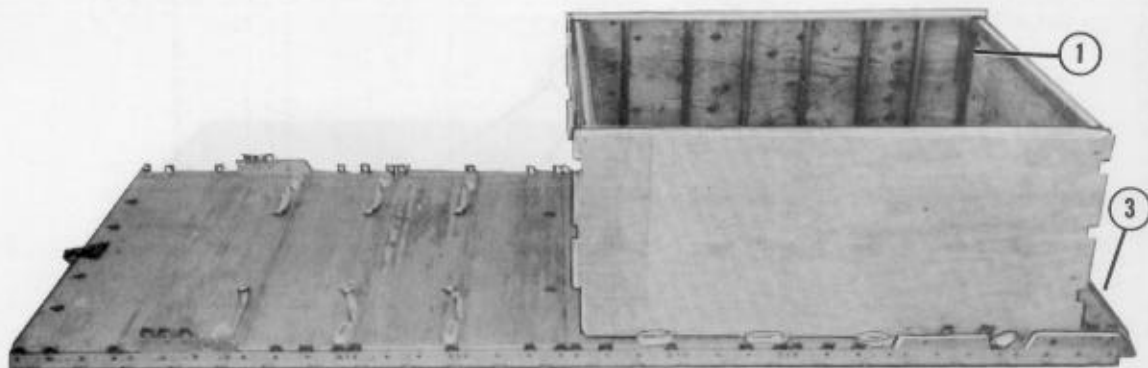
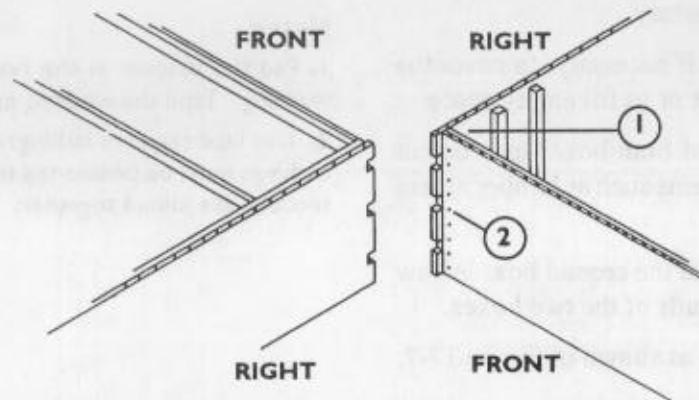
- Notes: 1. This drawing is not drawn to scale.
2. Use 8d nails.



- 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 17-5. Tops of boxes constructed

Note: This drawing is not drawn to scale.



- ① Assemble the box on the platform. Fit each end of the first box between the sides with the left and right of each end flush against the inside vertical lumber uprights on the sides.
- ② Nail the pieces of the box together with 8d nails through the ends of the box into the vertical lumber pieces in the sides.
- ③ Be sure that the front end of the box is centered and 9 inches from the front edge of the platform.

Figure 17-6. Box partially assembled for loading

17-5. Loading and Closing the Boxes

Load and close the boxes as described below.

- a. Use the tie-down rings inside the box to secure the load, if necessary.
- b. Use honeycomb, if necessary, to cover the platform inside the box or to fill empty space.
- c. The inside ends of both boxes may be cut out to allow for long items such as lumber or tent poles.
- d. Assemble and load the second box. Allow 6 inches between the ends of the two boxes.
- e. Close both boxes as shown in Figure 17-7.

17-6. Installing Lashings

Install the lashings and secure pre-positioned lashings as shown in Figures 17-8 through 17-15.

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. Lashings must be positioned through clevises before sections are joined together.

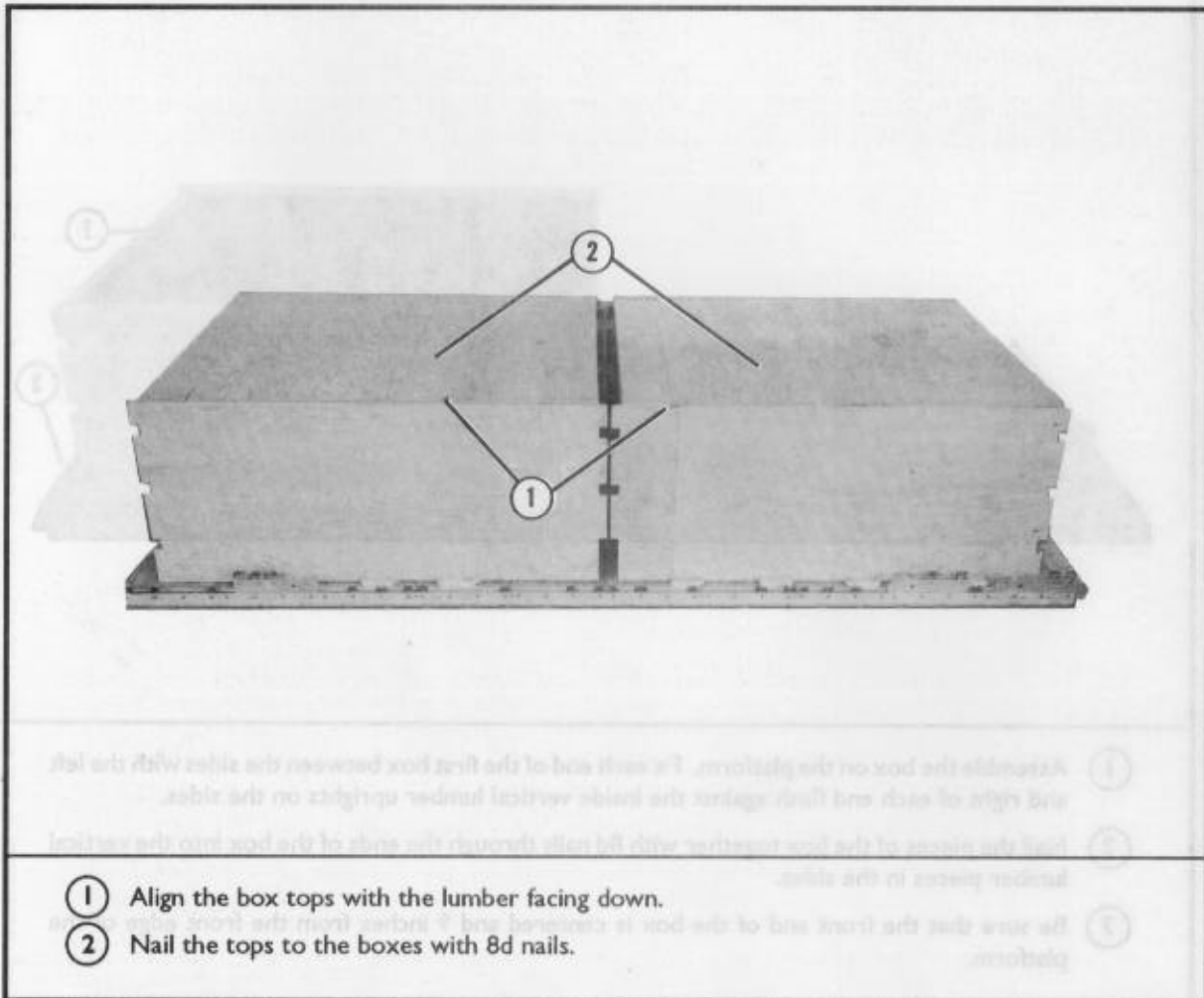
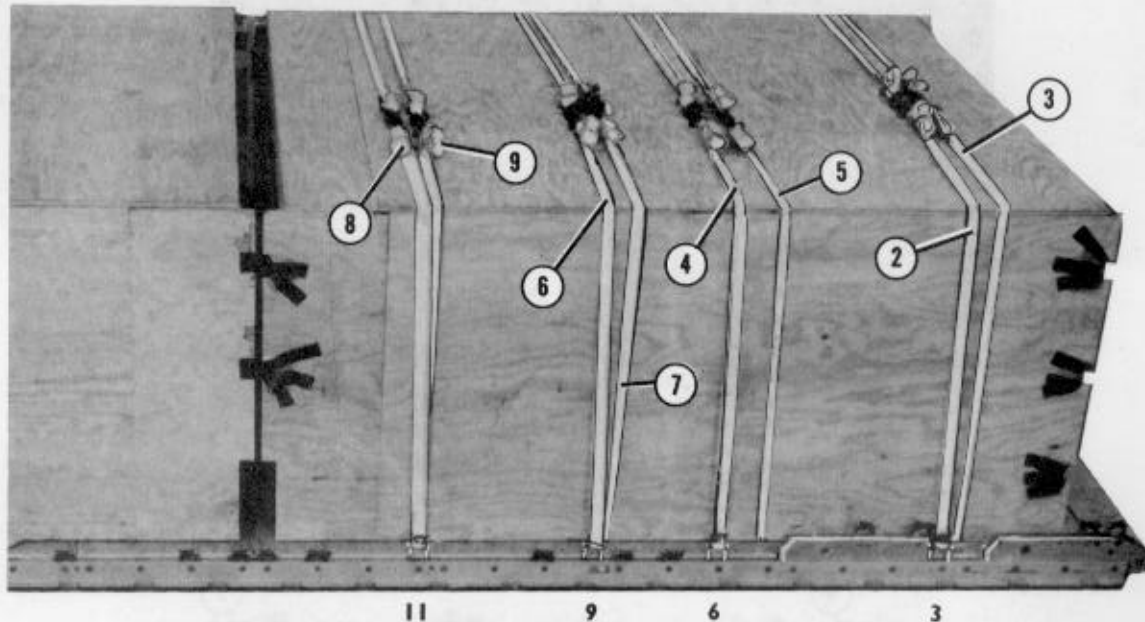


Figure 17-7. Boxes closed



- ① Pass a 15-foot lashing through clevis 3 and through its own D-ring. Do the same for clevises 3A, 6, 6A, 9, 9A, 11, and 11A.
- ② Secure the pre-positioned lashing in tie-down ring B2 to the lashing in clevis 3 on top of the box with two D-rings and a load binder.
- ③ Secure the pre-positioned lashing in tie-down ring A2 to the lashing in clevis 3A on top of the box with two D-rings and a load binder.
- ④ Secure the pre-positioned lashing in tie-down ring B3 to the lashing in clevis 6 on top of the box with two D-rings and a load binder.
- ⑤ Secure the pre-positioned lashing in tie-down ring A3 to the lashing in clevis 6A on top of the box with two D-rings and a load binder.
- ⑥ Secure the pre-positioned lashing in tie-down ring B4 to the lashing in clevis 9 on top of the box with two D-rings and a load binder.
- ⑦ Secure the pre-positioned lashing in tie-down ring A4 to the lashing in clevis 9A on top of the box with two D-rings and a load binder.
- ⑧ Secure the pre-positioned lashing in tie-down ring B5 to the lashing in clevis 11 on top of the box with two D-rings and a load binder.
- ⑨ Secure the pre-positioned lashing in tie-down ring A5 to the lashing in clevis 11A on top of the box with two D-rings and a load binder.

Figure 17-8. Pre-positioned lashings secured to lashings on platform rails

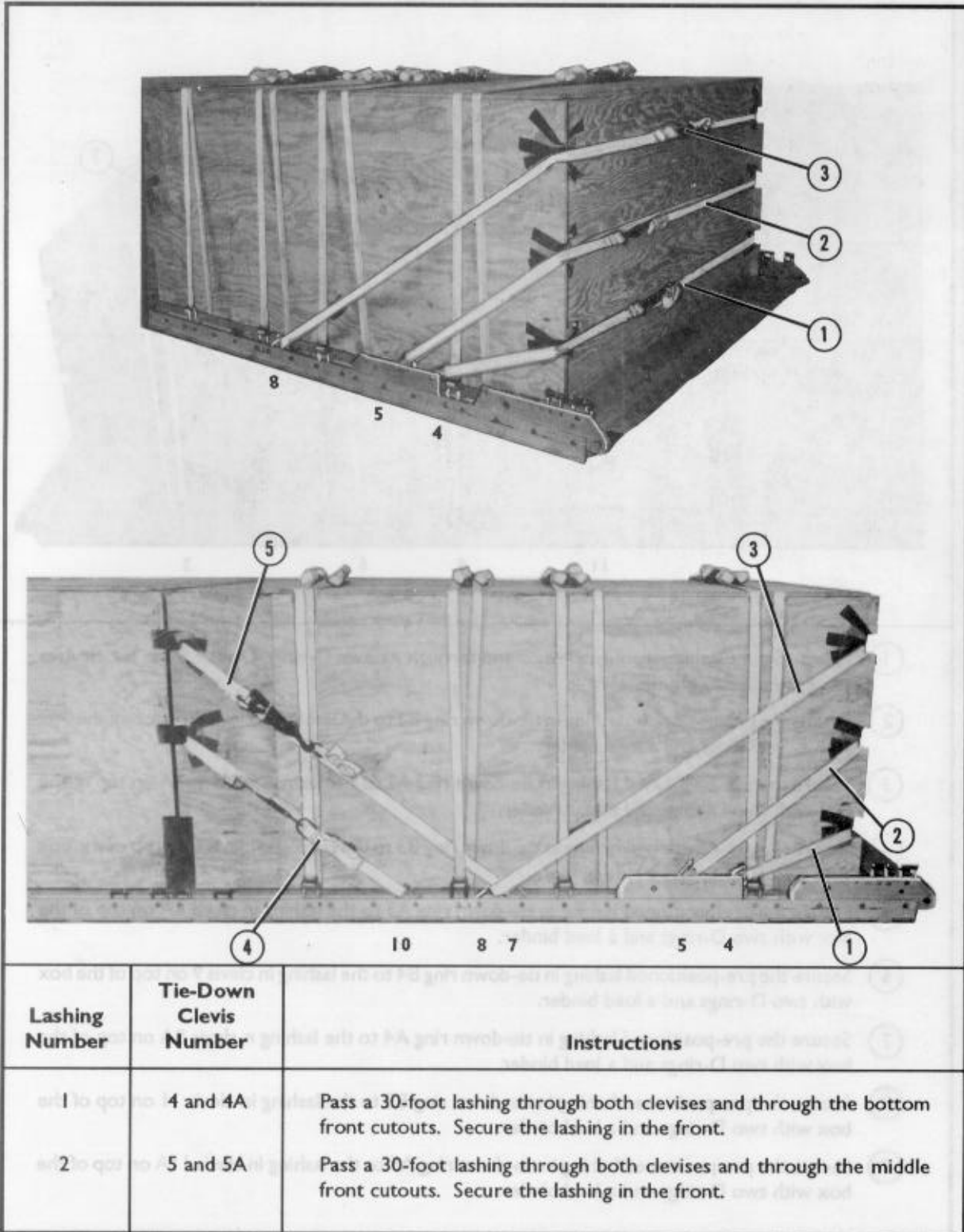
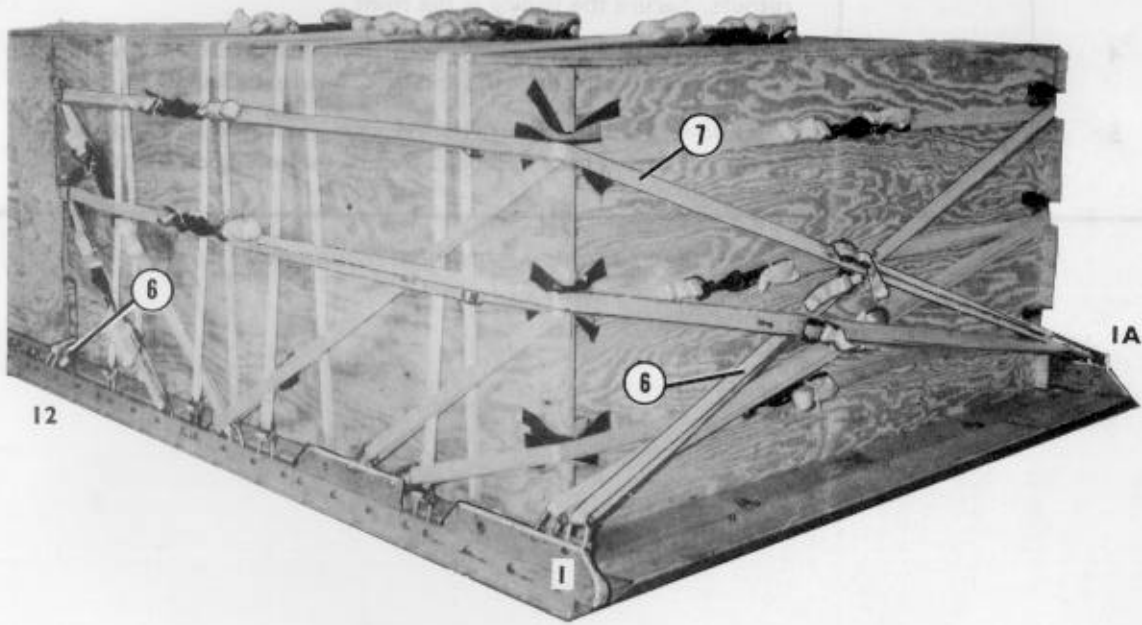


Figure 17-9. Lashings 1 through 5 installed

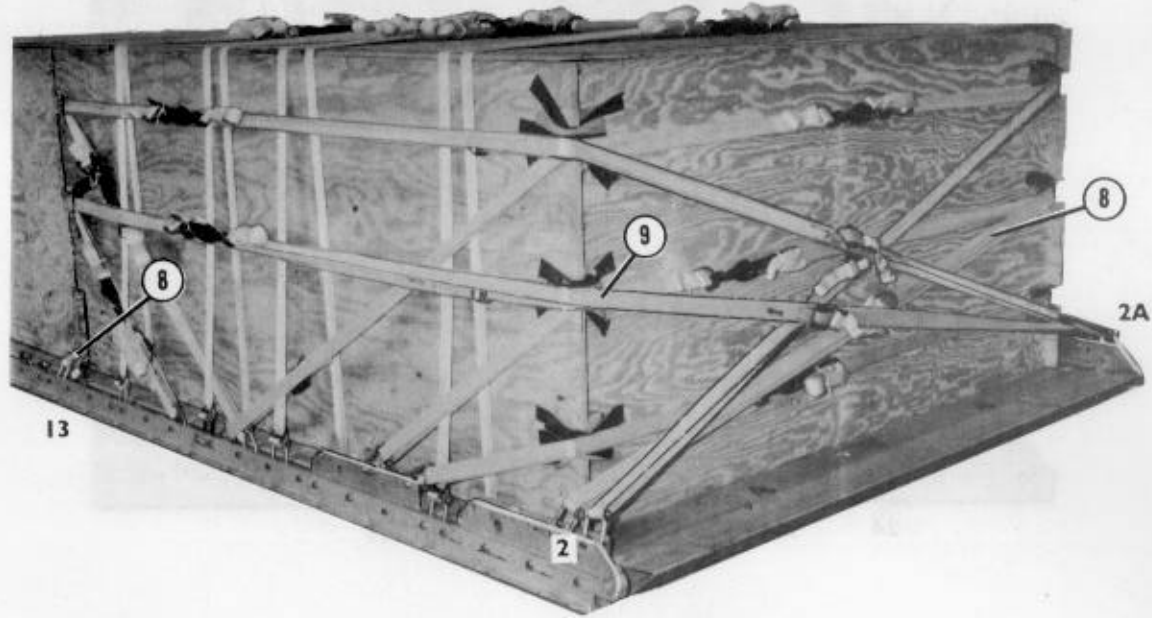
Lashing Number	Tie-Down Clevis Number	Instructions
3	8 and 8A	Pass a 45-foot lashing through both clevises and through the top front cutouts. Secure the lashing in the front.
4	10 and 10A	Pass a 45-foot lashing through both clevises and through the middle cutouts on the rear side of the first box. Secure the lashing on the side.
5	7 and 7A	Pass a 45-foot lashing through both clevises and through the top cutouts on the rear side of the first box. Secure the lashing on the side.

Figure 17-9. Lashings 1 through 5 installed (continued)



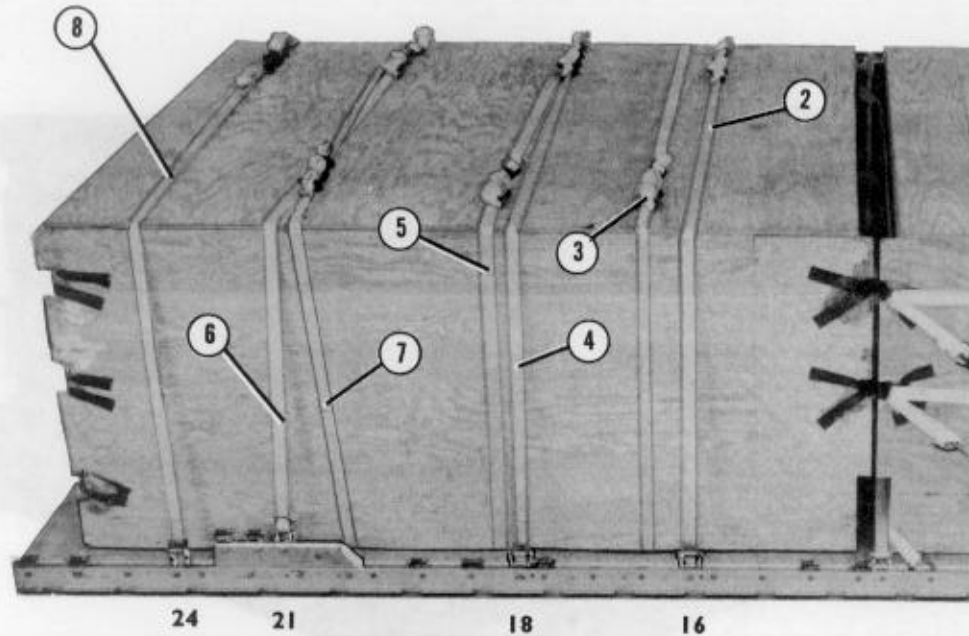
Lashing Number	Tie-Down Clevis Number	Instructions
6	1 and 12	Pass a 60-foot lashing through clevis 1, through the top cutout in the left side of the first box, and around the left side of the box. Pass the lashing through the top left cutout on the rear end of the first box and through clevis 12. Secure the lashing on the left side.
7	1A and 12A	Pass a 60-foot lashing through clevis 1A, through the top cutout in the right side of the first box, and around the right side of the box. Pass the lashing through the top right cutout on the rear end of the first box, and through clevis 12A. Secure the lashing on the right side.

Figure 17-10. Lashings 6 and 7 installed



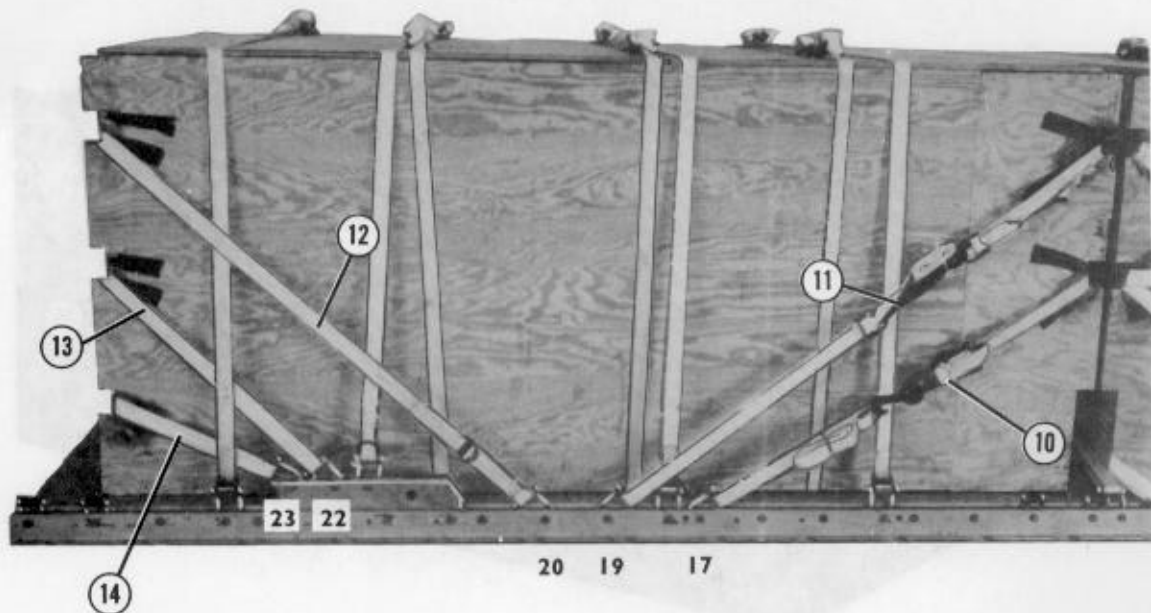
Lashing Number	Tie-Down Clevis Number	Instructions
8	2 and 13	Pass a 60-foot lashing through clevis 2, through the middle left cutout in the left side of the first box, and around the left side of the box. Pass the lashing through the middle left cutout on the rear end of the first box and through clevis 13. Secure the lashing on the left side.
9	2A and 13A	Pass a 60-foot lashing through clevis 2A, through the middle right cutout in the right side of the first box, and around the right side of the box. Pass the lashing through the middle right cutout on the rear end of the first box and through clevis 13A. Secure the lashing on the right side.

Figure 17-11 Lashings 8 and 9 installed



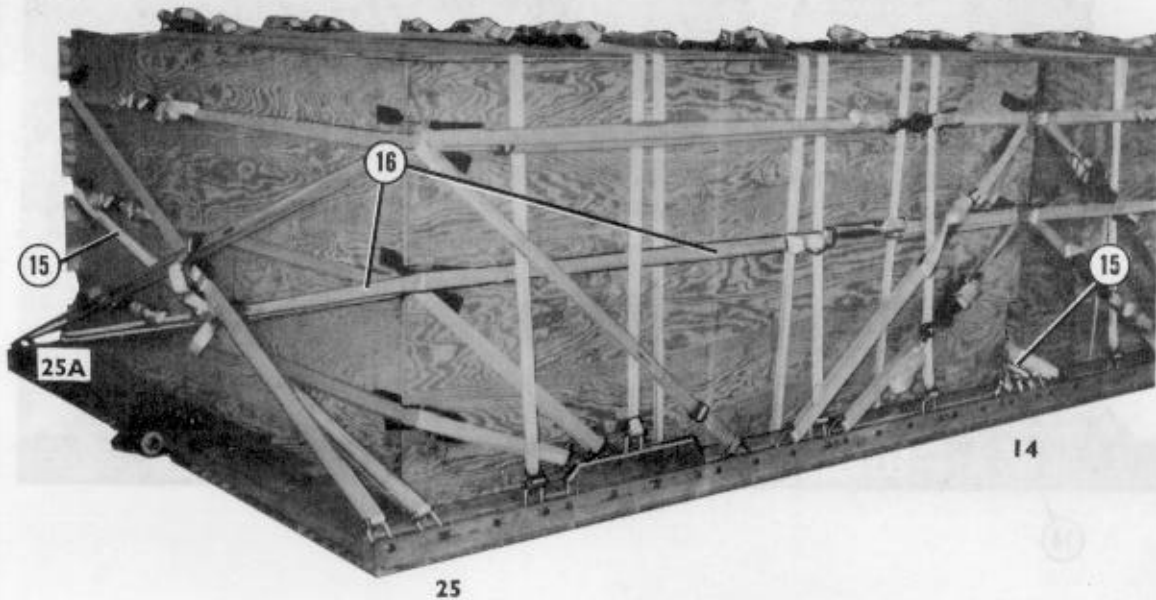
- ① Pass a 15-foot lashing through clevis 16 and through its own D-ring. Do the same for clevis 16A, 18, 18A, 21, 21A, 24, and 24A.
- ② Secure the pre-positioned lashing in tie-down ring B7 to the lashing in clevis 16 on top of the box with two D-rings and a load binder.
- ③ Secure the pre-positioned lashing in tie-down ring A7 to the lashing in clevis 16A on top of the box with two D-rings and a load binder.
- ④ Secure the pre-positioned lashing in tie-down ring B8 to the lashing in clevis 18 on top of the box with two D-rings and a load binder.
- ⑤ Secure the pre-positioned lashing in tie-down ring A8 to the lashing in clevis 18A on top of the box with two D-rings and a load binder.
- ⑥ Secure the pre-positioned lashing in tie-down ring B9 to the lashing in clevis 21 on top of the box with two D-rings and a load binder.
- ⑦ Secure the pre-positioned lashing in tie-down ring A9 to the lashing in clevis 21A on top of the box with two D-rings and a load binder.
- ⑧ Secure the lashings in clevises 24 and 24A together on top of the box with two D-rings and a load binder.

Figure 17-12. Pre-positioned lashings secured to lashings on platform rails



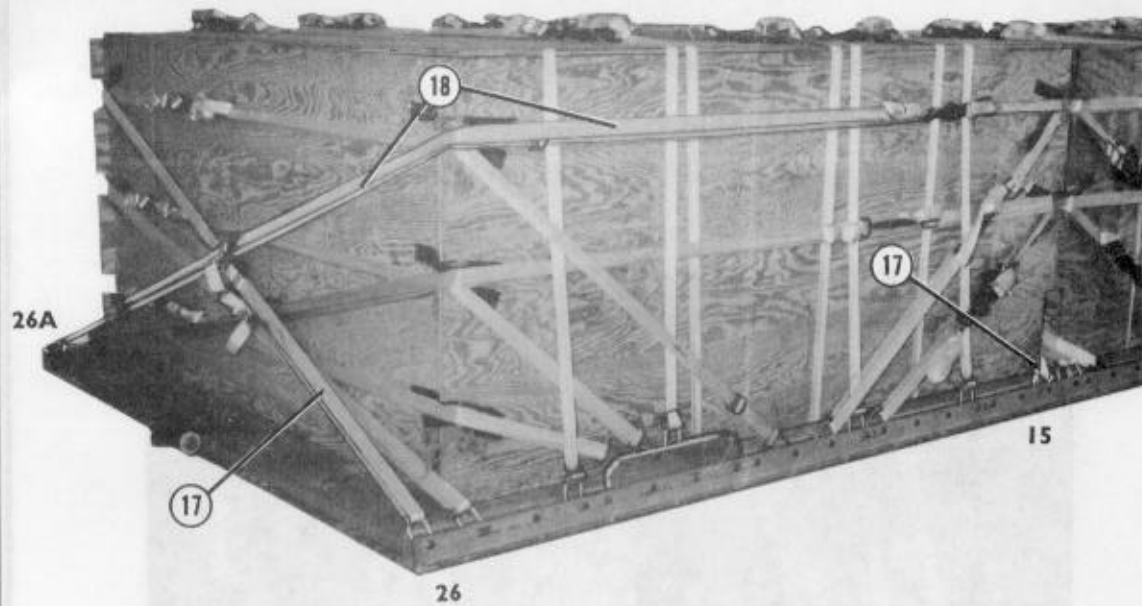
Lashing Number	Tie-Down Clevis Number	Instructions
10	17 and 17A	Pass a 30-foot lashing through both clevises and through the middle cutouts in the front end of the second box. Secure the lashing on the side.
11	19 and 19A	Pass a 45-foot lashing through both clevises and through the top cutouts in the front end of the second box. Secure the lashing on the side.
12	20 and 20A	Pass a 45-foot lashing through both clevises and through the top rear cutouts. Secure the lashing in the rear.
13	22 and 22A	Pass a 30-foot lashing through both clevises and through the middle rear cutouts. Secure the lashing in the rear.
14	23 and 23A	Pass a 30-foot lashing through both clevises and through the bottom rear cutouts. Secure the lashing in the rear.

Figure 17-13. Lashings 10 through 14 installed



Lashing Number	Tie-Down Clevis Number	Instructions
15	14 and 25	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 at the rear and through clevis 25. Secure the lashing in the rear.
16	14A and 25A	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 at the rear and through clevis 25A. Secure the lashing on the right side.

Figure 17-14. Lashings 15 and 16 installed

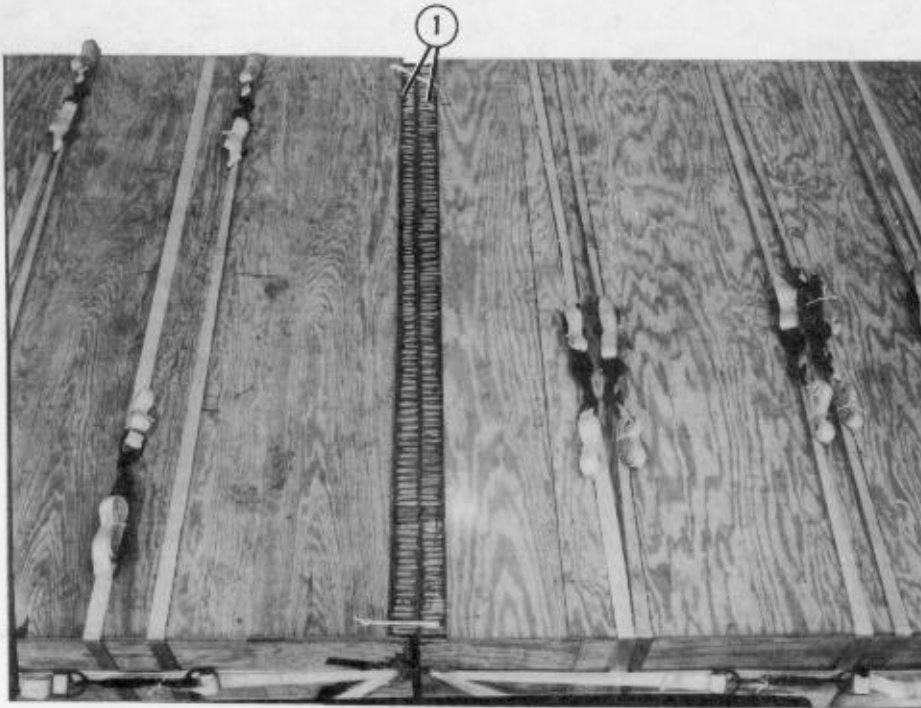


Lashing Number	Tie-Down Clevis Number	Instructions
17	15 and 26	Pass a 60-foot lashing through clevis 15, through the top cutout in the left side of the second box, and around the left side of the box. Pass the lashing through the top left rear cutout and through clevis 26. Secure the lashing in the rear.
18	15A and 26A	Pass a 60-foot lashing through clevis 15A, 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 rear cutout and through clevis 26A. Secure the lashing on the right side.

Figure 17-15. Lashings 17 and 18 installed

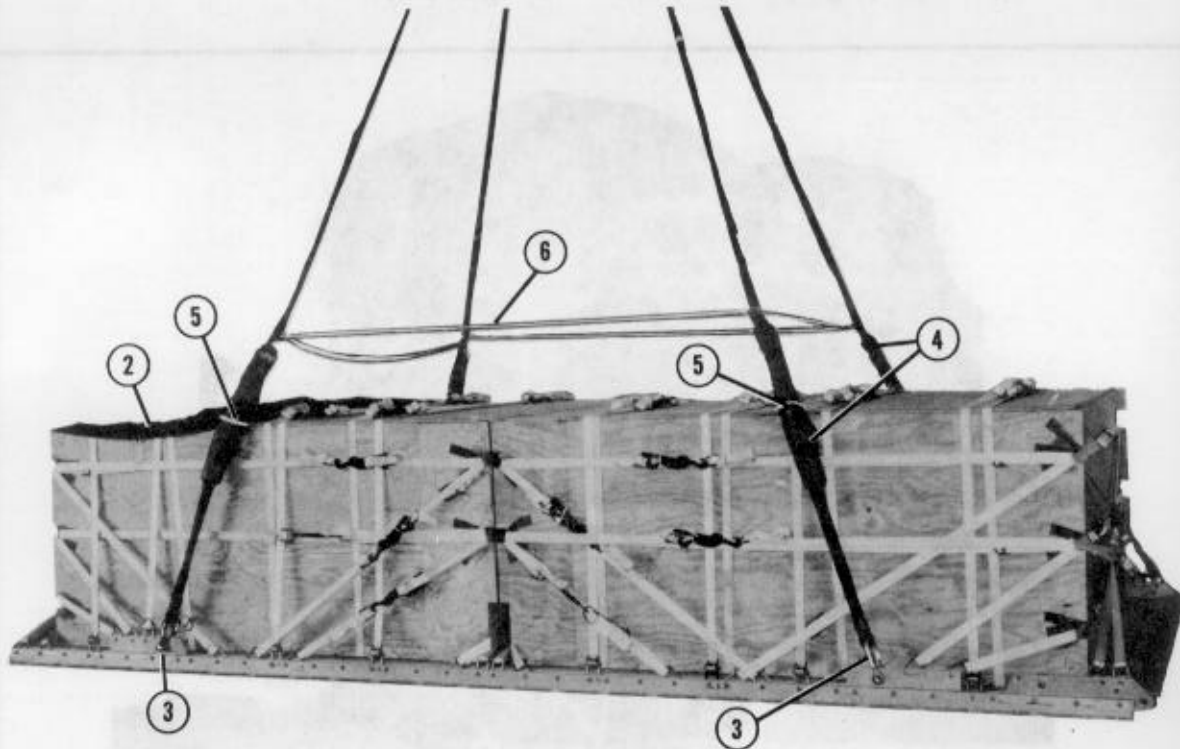
17-7. Installing Load Cover, Suspension Slings, and Deadman's Tie

Install the load cover, honeycomb buffers, suspension slings, and deadman's tie as shown in Figure 17-16.



- 1 Slide two 6- by 92-inch pieces of honeycomb between the two boxes at the top. The honeycomb may be held in place by lengths of type III nylon cord tied around the honeycomb and through holes drilled in convenient locations on the boxes.

Figure 17-16. Load cover, suspension slings, and deadman's tie installed



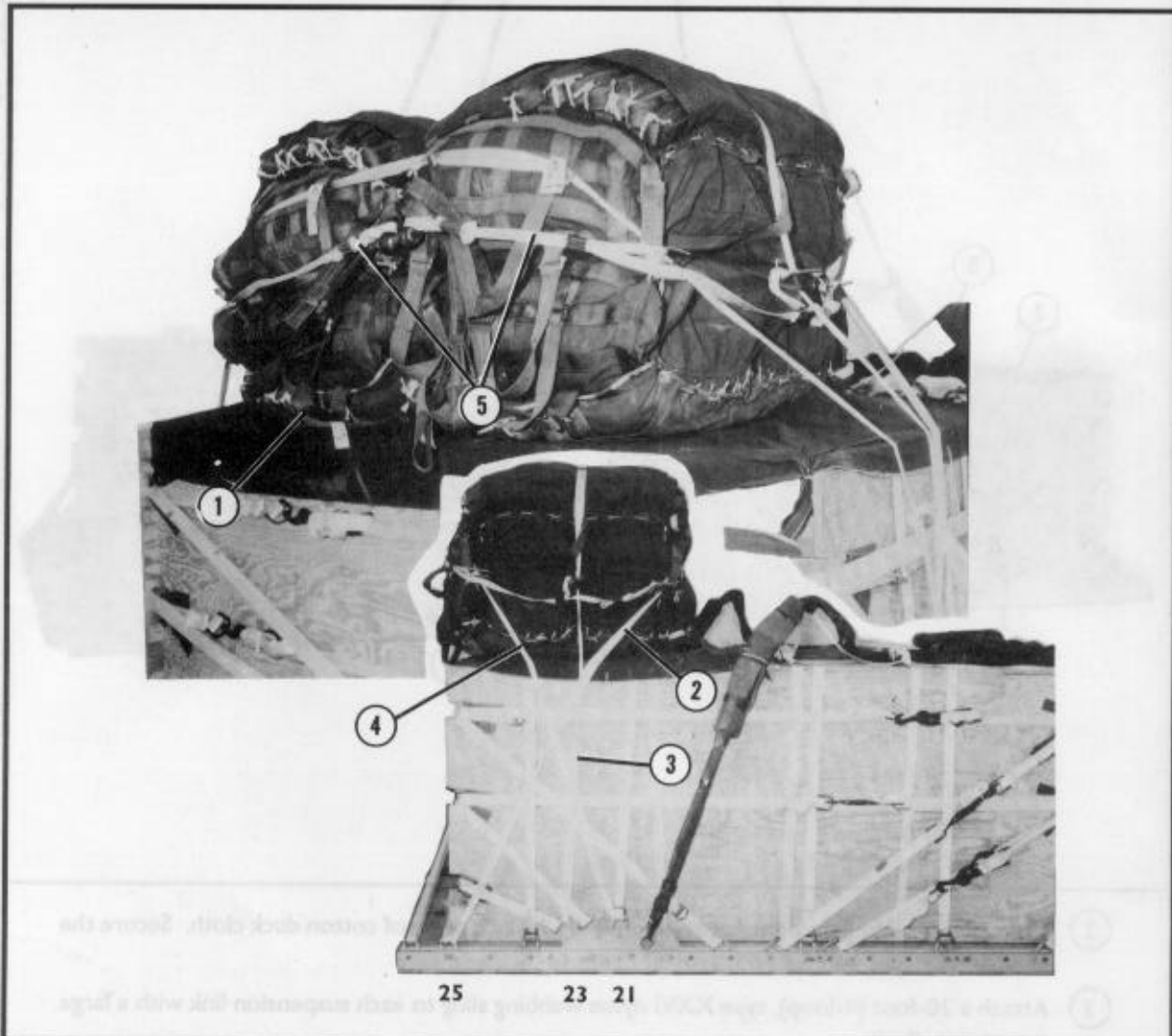
- ② Cover the rear fourth of the load with a 60- by 96-inch piece of cotton duck cloth. Secure the cloth to adjacent lashings with type III nylon cord.
- ③ Attach a 20-foot (4-loop), type XXVI nylon webbing sling to each suspension link with a large suspension clevis.
- ④ Pull the suspension slings tight above the load. Pad each suspension sling 36 inches above the clevis with a 9- by 24-inch piece of felt. Tape the felt in place 2 inches past each end of the felt and in the center.
- ⑤ Tie the front suspension slings together over the top of the load with a length of type III nylon cord. Tie the rear suspension slings together in the same way.
- ⑥ Install the deadman's tie according to FM 10-500-2/TO 13C7-1-5.

Figure 17-16. Load cover, suspension slings, and deadman's tie installed (continued)

17-8. Installing Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for the number of cargo parachutes required for the weight of this load. Four G-11B cargo parachutes are

shown here. Install the cargo parachutes according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 17-17.

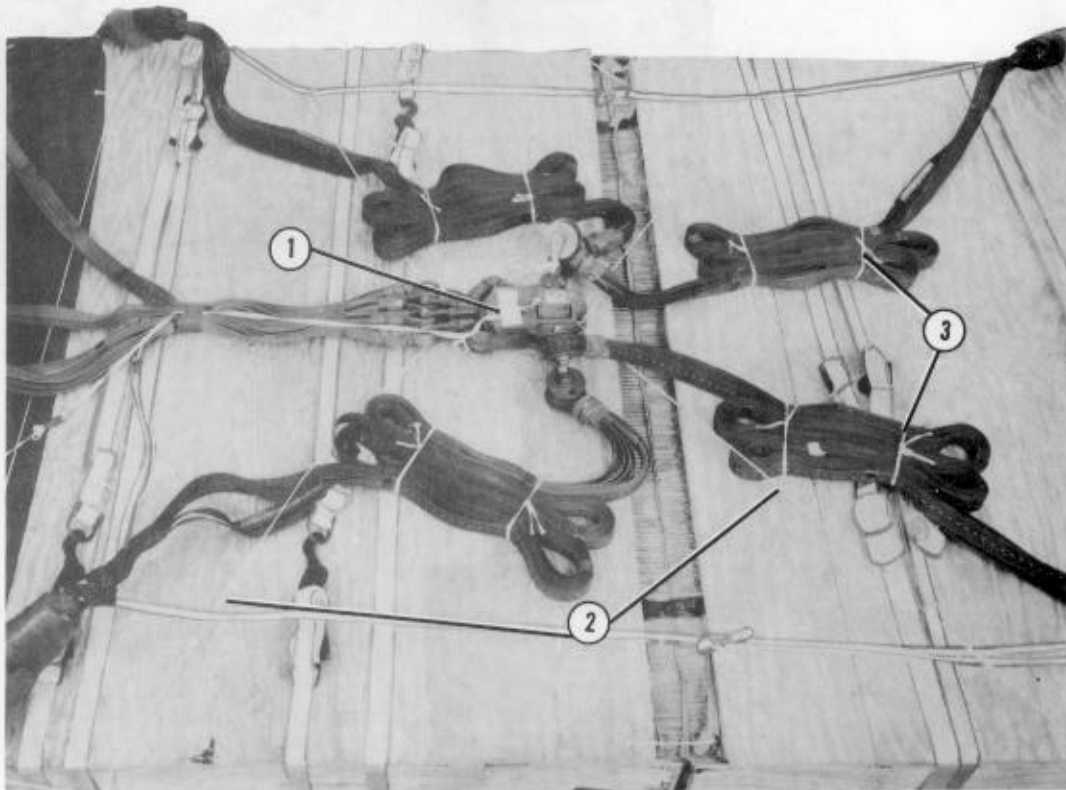


- ① Install the cargo parachutes at the rear of the load.
- ② Tie the front parachute restraint strap to clevises 25 and 25A.
- ③ Tie the center parachute restraint strap to clevises 23 and 23A.
- ④ Tie the rear parachute restraint strap to clevises 21 and 21A.
- ⑤ Install two multicut parachute release straps.

Figure 17-17. Four G-11B cargo parachutes installed

17-9. Installing Release System

Install and safety an M-2 cargo parachute release assembly as shown in Figure 17-18.

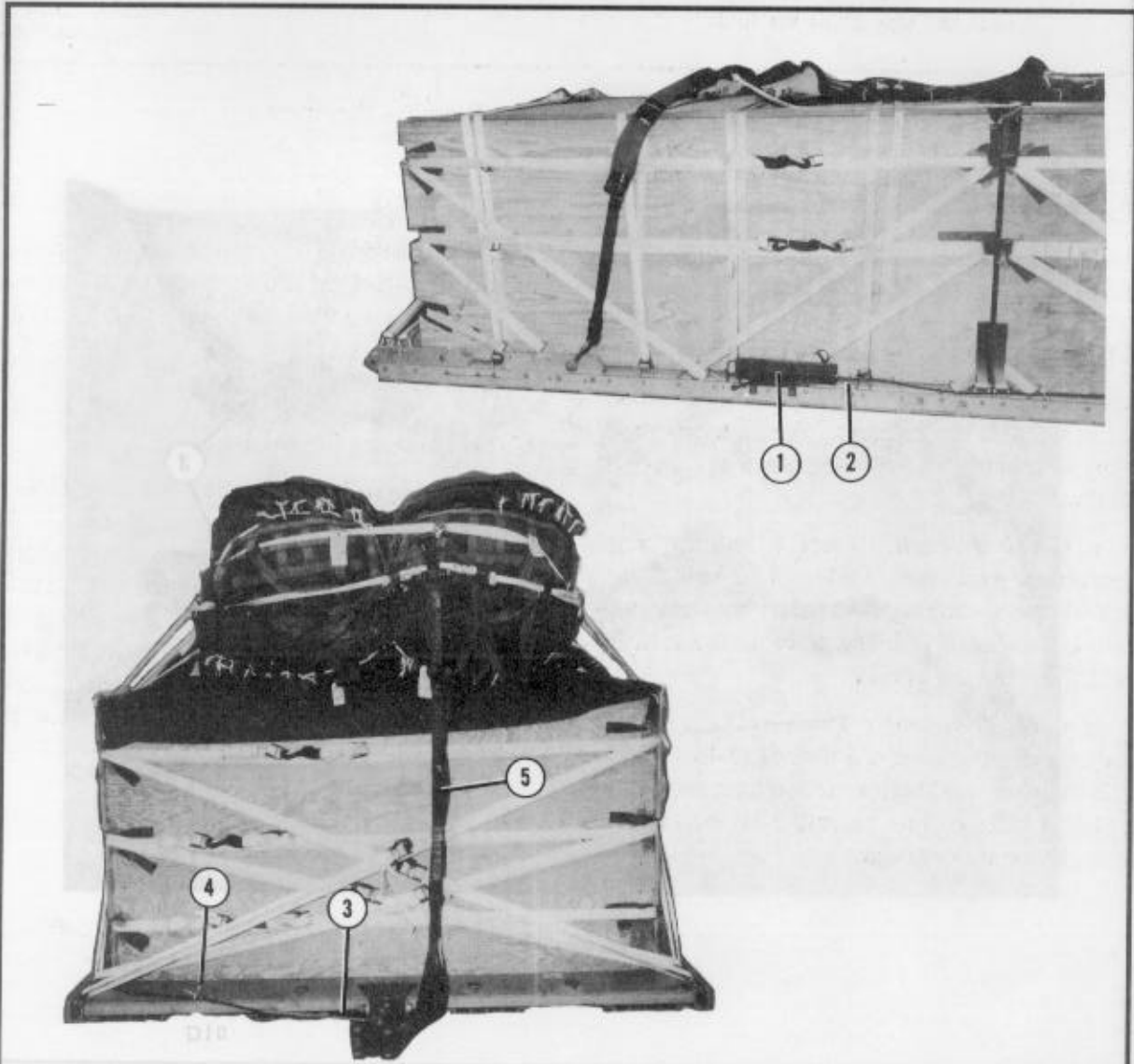


- ① Prepare and install an M-2 cargo parachute release assembly according to FM 10-500-2/TO 13C7-1-5. Place the release assembly in front of the parachutes as shown.
- ② Safety the release to convenient points on the load with type III nylon cord.
- ③ S-fold and tie the slack in the suspension slings with type I, 1/4-inch cotton webbing.

Figure 17-18. Release assembly installed

17-10. Installing Extraction System

Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 17-19.



- ① Install the EFTA actuator brackets to the rear mounting holes on the left platform side rail.
- ② Attach a 20-foot release cable to the actuator. Install the actuator to the brackets and run the cable to the rear.

Figure 17-19. Extraction system installed

- ③ Install the latch assembly to the extraction bracket. Attach the release cable to the latch assembly.
- ④ Tie the cable to tie-down ring D10 with type I, 1/4-inch cotton webbing.
- ⑤ Install a 12-foot (2-loop), type XXVI nylon webbing sling as the deployment line. S-fold the slack and tape or tie the folds.

Figure 17-19. Extraction system installed (continued)

17-11. Installing Provisions for Emergency Restraints

Install provisions for emergency restraints according to FM 10-500-2/TO 13C7-1-5.

17-12. Placing Extraction Parachutes

Consult FM 10-500-2/TO 13C7-1-5 for extraction parachute requirements. Position the extraction parachutes for the load shown 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-141B 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.

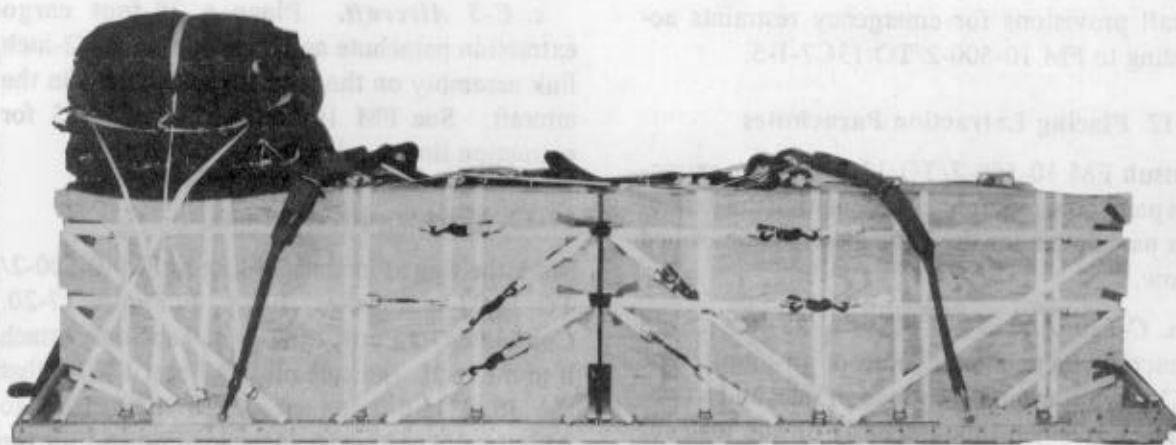
c. C-5 Aircraft. Place a 28-foot cargo extraction parachute and a two-point, 5 1/2-inch link assembly on the load for installation in the aircraft. See FM 10-500-2/TO 13C7-1-5 for extraction line requirements.

17-13. Marking Rigged Load

Mark the rigged load according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 17-20. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the load had been prepared according to AFR 71-4/TM 38-250. If the load varies from the one shown, recompute the weight, height, CB, and parachute requirements according to FM 10-500-2/TO 13C7-1-5.

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.....	6,300 pounds
	Maximum load allowed.....	21,500 pounds
Height	.....	88 inches
Width	.....	108 inches
Length	.....	240 inches
Overhang:	Front	0 inches
	Rear	0 inches
CB (from front edge of platform)	.....	126 inches
Extraction System (adds 18 inches to length of platform)	.....	EFTC

Figure 17-20. Mass supply boxes rigged on a 20-foot, type V platform for low-velocity airdrop

17-14. Equipment Required

Use the equipment listed in Table 17-1 to rig the load shown.

Note:

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

Table 17-1. Equipment required for rigging mass supply boxes on a 20-foot type V platform for low-velocity airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
4030-00-090-5354	Clevis, suspension, 1-in (large)	5
8305-00-242-3593	Cloth, cotton duck, 60-in	As required
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5787	Coupling, airdrop, extraction force transfer w 20-ft cable	1
1670-00-360-0329	Cover, link assembly, type IV	12
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	As required
8305-00-958-3685	Felt sheet, 1/2-in	As required
1670-01-183-2678	Leaf, extraction line	2
	* Line, extraction, type XXVI nylon webbing:	
1670-01-062-6313	60-ft (3-loop) or	1
1670-01-107-7651	140-ft (3-loop)	1
	Link assembly:	
	Two-point, 5 1/2-in:	1
5306-00-435-8994	Bolt, 1-in diam, 4 in long	(2)
5310-00-232-5165	Nut, 1-in	(2)
1670-00-003-1954	Plate, side, 5 1/2-in	(2)
5365-00-007-3414	Spacer, large	(2)
1670-00-783-5988	Type IV	12
5510-00-220-6146	Lumber, 2- by 4- by:	
	45-in	32
	85-in	16
	106 1/2-in	8
5315-00-010-4659	Nail, steel wire, common, 8d	As required
1670-00-753-3928	Pad, energy-dissipating, honeycomb, 3- by 36- by 96-in:	1 sheet
	6- by 92-in	2
1670-01-016-7841	Parachute, cargo, G-11B	4

* Both extraction lines may be needed for C-5 aircraft.

Table 17-1. Equipment required for rigging mass supply boxes on a 20-foot type V platform for low-velocity airdrop (continued)

National Stock Number	Item	Quantity
1670-01-063-3715	Parachute, cargo extraction: 15-ft	1
1670-00-040-8135	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)
1670-01-162-2385	Bumper, nose	(1)
1670-01-162-2372	Clevis assembly (type V)	(52)
1670-01-247-2389	Suspension link	(4)
1670-01-162-2381	Tandem link (multipurpose)	(2)
5530-00-128-4981	Plywood, 3/4-in:	12 sheets
	16- by 48-in	(4)
	92- by 48-in	(4)
	93 1/2- by 12-in	(2)
	93 1/2- by 48-in	(4)
	96- by 48-in	(4)
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 suspension:	
1670-01-064-4453	20-ft (4-loop)	4
	For riser extension:	
1670-01-062-6302	20-ft (2-loop)	12
1670-00-040-8219	Strap, parachute release, multicut (comes w 3 knives)	2
7510-00-266-5016	Tape, adhesive, PSA, cloth back, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-ft	93
	Webbing:	
8305-00-268-2411	Cotton, 1/4-in, type I	As required
	Nylon:	
8305-00-082-5752	Tubular, 1/2-in, natural	As required
8305-00-263-3591	Type VIII	As required

GLOSSARY

ACB	attitude control bar	FM	field manual
AD	airdrop	ft	feet/foot
AFB	Air Force base	gal	gallon
AFR	Air Force regulation	HQ	Headquarters
AFTO	Air Force technical order	in	inch
ALC	Airlift Logistics Center	LAPES	low-altitude parachute extraction system
AMC	Air Mobility Command	lb	pound
ATTN	attention	LV	low-velocity
C	change	MAC	Military Airlift Command
cap	capacity	mm	millimeter
CB	center of balance	no	number
chap	chapter	PEFTC	extraction force transfer coupling (platform)
d	penny	sec	second
DA	Department of the Army	SL/CS	static line/connector strap
DC	District of Columbia	TM	technical manual
DD	Department of Defense	TO	technical order
diam	diameter	TOW	tube-launched, optically tracked, wire-guided
DS	direct support	US	United States
EFTA	extraction force transfer actuator	w	with
EFTC	extraction force transfer coupling		
FAST	Forward Area Surgical Team		
fig	figure		

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