

**AIRDROP OF SUPPLIES AND EQUIPMENT:**

# **RIGGING MOTORCYCLES AND QUAD-RUNNERS**



**DISTRIBUTION RESTRICTION.** Approved for public release; distribution is unlimited.

**HEADQUARTERS  
DEPARTMENT OF THE ARMY  
DEPARTMENT OF THE AIR FORCE**

**This Publication is available on the  
General Dennis J. Reimer Training  
And Doctrine Digital Library at  
[www.adtdl.army.mil](http://www.adtdl.army.mil)**

CHANGE  
NO 1

Headquarters  
Department of the Army  
Department of the Air Force  
Washington, DC, 1 January 2001

## Airdrop of Supplies and Equipment: Rigging Motorcycles and Quad-Runners

This change adds the procedures for rigging the 250- to 300-cubic centimeter Kawasaki or equivalent motorcycles and the 350-cubic centimeter Yamaha four-wheeled quad-runner on a combat expendable platform for low-velocity airdrop.

FM 10-500-77/TO 13C7-55-1, 1 February 2000, is changed as follows:

1. New or changed material is identified by a vertical bar ( █ ) in the margin opposite the changed material.
2. File this transmittal page in front of the publication
3. Remove old pages and insert new pages as indicated below:

### Remove old pages

Cover

i-iii

1-0

Glossary-1

References-1

### Insert new pages

Cover

i-iv

1-0

4-1 through 4-18

Glossary-1

References-1


**Distribution Restriction:** Approved for public release; distribution is unlimited.

**C1, FM 10-500-77/TO 13C7-55-1**  
**1 JANUARY 2001**

By Order of the Secretary of the Army and the Air Force:

**ERIC K. SHINSEKI**  
*General, United States Army*  
*Chief of Staff*

Official:

  
**JOEL B. HUDSON**  
*Administrative Assistant to the*  
*Secretary of the Army*  
0033902

**GEORGE T. BABBITT**  
General, USAF  
Commander, AFMC

**MICHAEL E. RYAN**  
General, USAF  
Chief of Staff

**DISTRIBUTION:**

Active Army, Army National Guard, and U.S. Army Reserve: To be distributed in accordance with the initial distribution number 113839, requirements for FM 10-500-77.



Field Manual  
No 10-500-77  
Technical Order  
No 13C7-55-1

Headquarters  
Department of the Army  
Department of the Air Force  
Washington, DC, 1 January 2001

# Airdrop of Supplies and Equipment: Rigging Motorcycles and Quad-Runners

## Contents

	Page
<b>PREFACE.....</b>	<b>iv</b>
<b>CHAPTER 1 INTRODUCTION</b>	
<b>Description of Items.....</b>	<b>1-0</b>
<b>Special Considerations.....</b>	<b>1-0</b>
<b>CHAPTER 2 RIGGING ONE MOTORCYCLE FOR LOW-VELOCITY AIRDROP</b>	
<b>Description of Load.....</b>	<b>2-1</b>
<b>Building and Preparing Combat-Expendable Platform.....</b>	<b>2-1</b>
<b>Preparing, Positioning, Protecting, and Securing Motorcycle.....</b>	<b>2-3</b>
<b>Stowing Cargo Parachutes.....</b>	<b>2-7</b>
<b>Marking Rigged Load.....</b>	<b>2-8</b>
<b>Equipment Required.....</b>	<b>2-9</b>
<b>CHAPTER 3 RIGGING TWO MOTORCYCLES FOR LOW-VELOCITY AIRDROP</b>	
<b>Description of Load.....</b>	<b>3-1</b>
<b>Building and Preparing Combat-Expendable Platform.....</b>	<b>3-1</b>
<b>Positioning and Joining A-22 Sling Assemblies.....</b>	<b>3-3</b>

**Distribution Restriction:** Approved for public release; distribution is unlimited.

Positioning A-22 Cargo Covers  
and Honeycomb.....3-5

Preparing, Positioning, and  
Protecting Motorcycles.....3-6

Closing Cargo Bags.....3-8

Attaching Suspension Slings.....3-12

Packing a 15-Foot Cargo  
Extraction Parachute.....3-13

Preparing and Stowing a G-12D or G-12E Cargo  
Parachute and the 15-Foot Cargo Extraction  
Parachute.....3-19

Marking Rigged Load.....3-20

Equipment Required.....3-21

**CHAPTER 4 RIGGING QUAD-RUNNERS FOR LOW-VELOCITY AIRDROP**

**Section I RIGGING ONE FOUR WHEELED QUAD-RUNNER FOR LOW-VELOCITY AIRDROP**

Description of Load.....4-1

Building and Preparing Combat-  
Expendable Platform.....4-1

Installing Suspension Slings.....4-4

Installing Load Restraints.....4-5

Positioning Honeycomb Stacks.....4-6

Preparing and Positioning Quad-Runner.....4-7

Securing Load to Platform.....4-8

Securing Accompanying Load .....4-9

Safelying Suspension Slings.....4-10

Stowing Cargo Parachute.....4-11

Installing Parachute Release.....4-12

Marking Rigged Load.....4-13

Equipment Required.....4-14

**Section II RIGGING ONE FOUR WHEELED QUAD-RUNNER IN A DOUBLE A-22 CONTAINER**

Description of Load.....4-16

Building and Preparing Combat-  
Expendable Platform.....4-16

Positioning and Joining A-22 Sling  
Assembly.....4-16

Positioning A-22 Cargo Covers.....4-16

Preparing and Positioning Honeycomb .....4-16

Preparing, Positioning and Protecting Quad.....4-17

Closing Cargo Bags.....4-17

Attaching Suspension Slings.....4-17

	<b>Page</b>
<b>Packing a 15-Foot Cargo Extraction Parachute.....</b>	<b>4-17</b>
<b>Preparing and Stowing G-12E Cargo Parachute and 15-Foot Cargo Extraction Parachute.....</b>	<b>4-17</b>
<b>Equipment Required.....</b>	<b>4-18</b>
<b>GLOSSARY.....</b>	<b>Glossary-1</b>
<b>REFERENCES.....</b>	<b>References-1</b>

## Preface

### Scope

This manual is designed for use by all parachute riggers. This manual shows and tells how to prepare and rig one or two 250- to 300-cubic centimeter Kawasaki or equivalent motorcycles and the 350-cubic centimeter Yamaha four wheeled quad-runner on a combat-expendable platform. They are rigged for low-velocity airdrop from a C-130, C-141, or C-17 aircraft.

### User Information

The proponent of this publication is HQ TRADOC. You are encouraged to report any errors or omissions and suggest ways for improving this manual.

Army personnel, send your comments on DA Form 2028 directly to:

Director  
Aerial Delivery and Field Services Department  
USA Quartermaster Center and School  
1010 Shop Road  
Fort Lee, Virginia 23801-1502

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

Headquarters  
Air Mobility Command (AMC/DOKT)  
402 Scott Drive, Unit 3AI  
Scott AFB, Illinois 62225-5302

Air Force personnel in Special Operations Command, send your reports on AFTO Form 22 through:

HQ AFSOC/DOXT  
100 Bartley Street, Suite 260  
Hurlburt Field, FL 32544-5273

to:

Director  
Aerial Delivery and Field Services Department  
USA Quartermaster Center and School  
1010 Shop Road  
Fort Lee, Virginia 23801-1502

Also send an information copy to AFTO Form 22 to:

SA-ALC/TILD  
485 Quentin Roosevelt Road  
Kelly AFB, Texas 78241-5000

## Chapter 1

# Introduction

### DESCRIPTION OF ITEMS

1-1. The description of the items covered in this manual is given below:

- Each motorcycle is 32 inches wide, 49 inches high, and 88 inches long. They each weigh 275 pounds.
- The four wheeled quad-runner is 45 inches wide, 65 inches high, 72 inches long and weighs 550 pounds.

### SPECIAL CONSIDERATIONS

1-2. Special considerations for this manual are described below.

- The loads covered in this manual may include hazardous materials as defined in AFJMAN 24-204/TM 38-250. If hazardous materials are included, they must be packaged, marked, and labeled as required by AFJMAN 24-204/TM 38-250.
- A copy of this manual must be available to the joint airdrop inspectors during the before-and after-loading inspections.

## Chapter 4

# Rigging Quad-Runners For Low-Velocity Airdrop

## SECTION I

### RIGGING ONE FOUR WHEELED QUAD-RUNNER FOR LOW-VELOCITY AIRDROP

#### DESCRIPTION OF LOAD

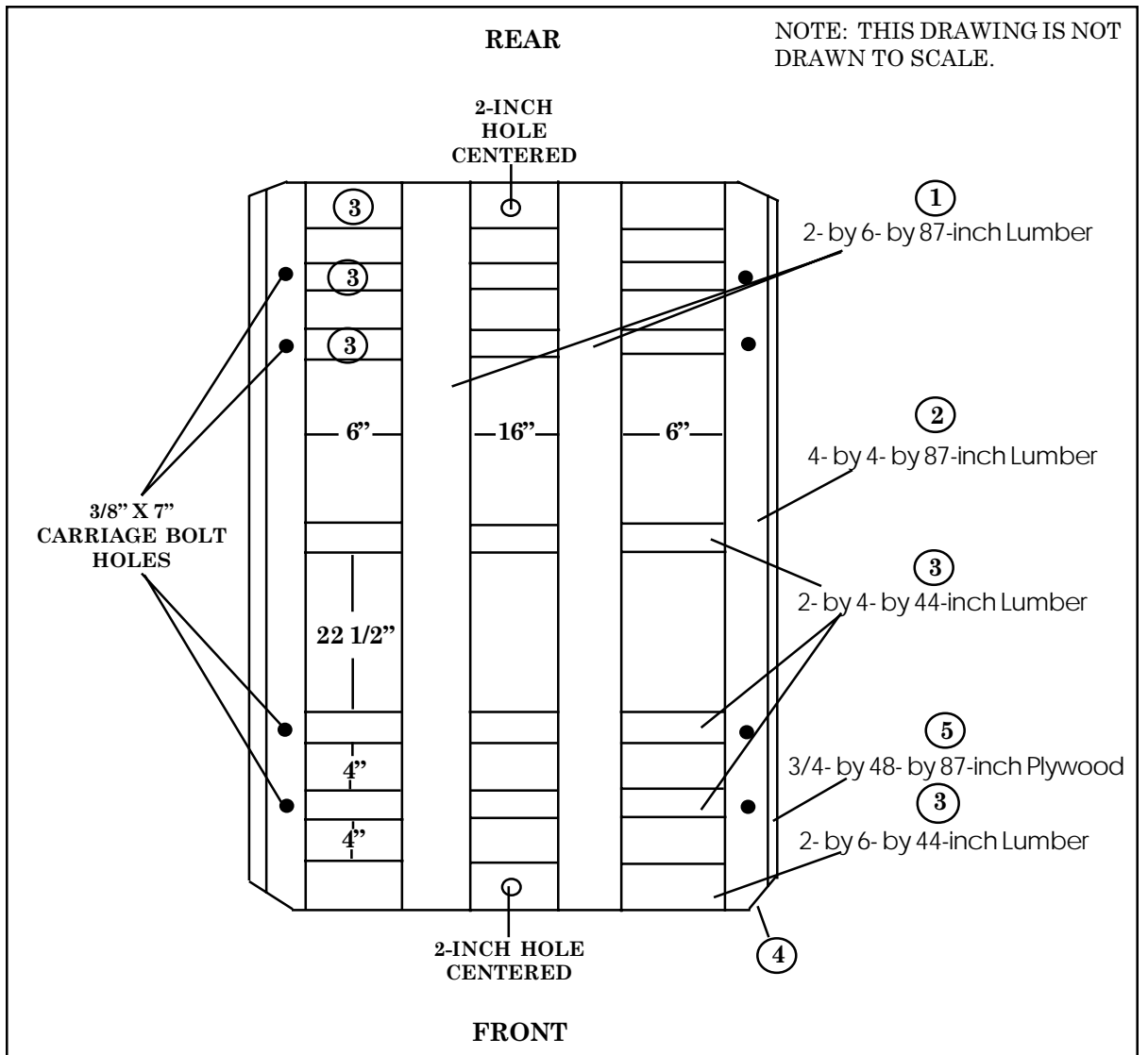
4-1. The four wheeled quad-runner (QUAD) is rigged on a 48-by 87-inch Combat Expendable Platform (CEP) with one G-12E cargo parachute. The load is rigged for a low velocity airdrop over the ramp of a C-130, C-141, or C-17 aircraft. The QUAD is 45 inches wide, 65 inches high, 72 inches long and weighs 550 pounds and is shown in *Figure 4-1*.

#### BUILDING AND PREPARING COMBAT-EXPENDABLE PLATFORM

4-2. Build and prepare the 48- by 87-inch CEP as shown in *Figure 4-2*.



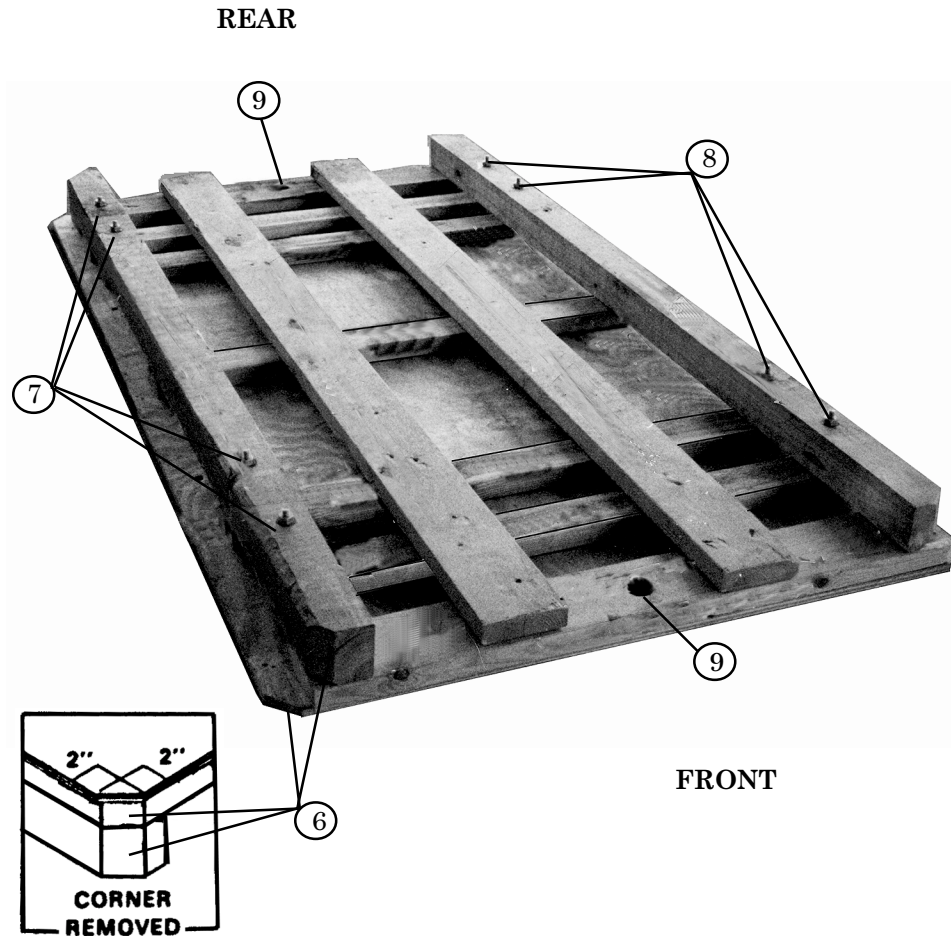
Figure 4-1. Four Wheeled Quad-Runner (QUAD)



NOTE: THIS DRAWING IS NOT DRAWN TO SCALE.

- ① Place two 2- by 6- by 87-inch pieces of lumber side by side 16 inches apart. (Longitudinal)
- ② Place two 4- by 4- by 87-inch pieces of lumber 6 inches to the outside of the 2- by 6- by 44-inch pieces of lumber. (Longitudinal)
- ③ Place five 2- by 4- by 44-inch and two 2- by 6- by 44-inch pieces of lumber across and on top of the lumber listed in steps 1 and 2 and as shown in diagram. (Lateral)
- ④ Nail the pieces of lumber together with 8 penny nails. Do not nail the extreme corners of the frame where the corners will be cut off.
- ⑤ Position and nail a 3/4- by 48- by 87-inch piece of plywood on top of the lumber leaving 2 inches overhang on each side.

Figure 4-2. Platform Prepared



- ⑥ Cut the four corners of the plywood and 4- by 4- by 87-inch pieces of lumber at 45 degree angles (2- by 2-inch).
- ⑦ Drill eight 3/8-inch holes at the suspension sling points as shown. Ensure the holes pass through the plywood and each end of each 2- by 4- by 44-inch lateral stringer and the 4- by 4- by 87-inch longitudinal stringers.
- ⑧ Insert a 3/8- by 7-inch carriage bolt into each hole, and bolt each of the lateral stringers to the longitudinal stringers.
- Note: Insert bolts from plywood deck side of platform and countersink carriage bolts head.**
- ⑨ Drill one 2 inch hole centered on 2-by 6-by 44-inch piece of lumber and plywood at each end of the platform.

Figure 4-2. Platform Prepared (Continued)



## INSTALLING SUSPENSION SLINGS

- 4-3. Mark the center of two 20-foot, 2-loop suspension slings with tape. Route the slings through the suspension points of the platform with the tape at the center of the platform. Secure the slings to the platform as shown in *Figure 4-3*.

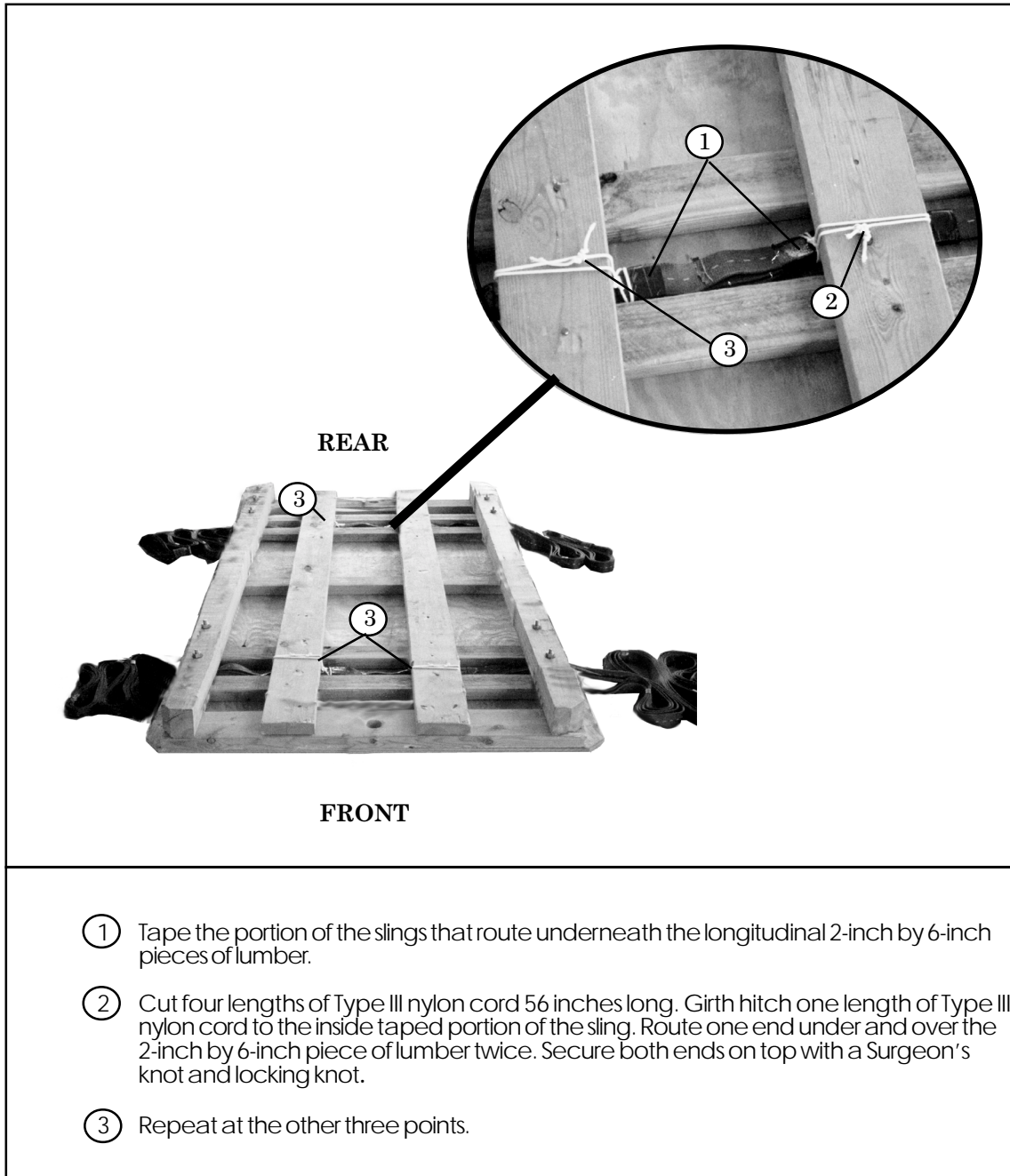
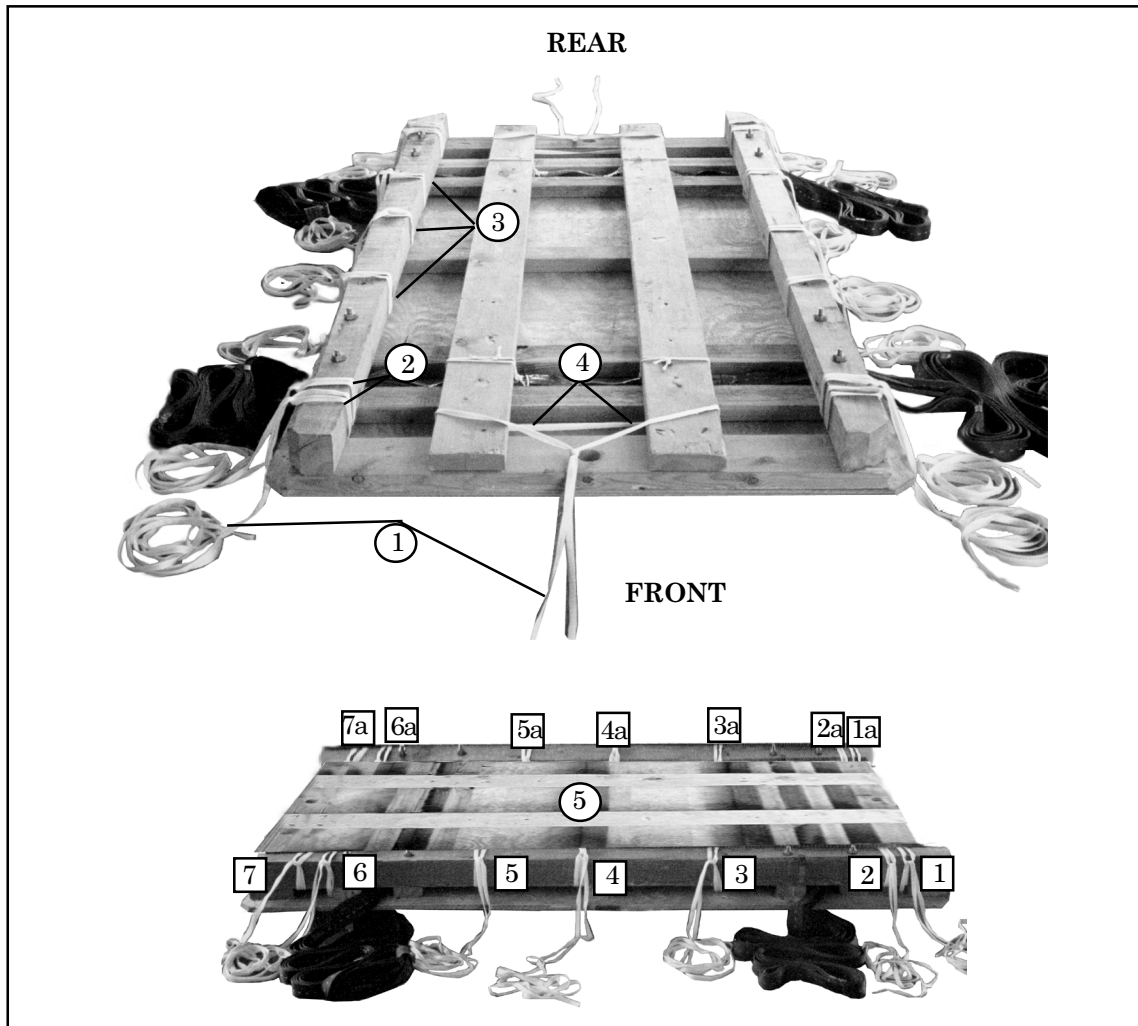


Figure 4-3. Suspension Slings Secured to Platform

## INSTALLING LOAD RESTRAINTS

4-4. Install the load restraints as shown in *Figure 4-4*.

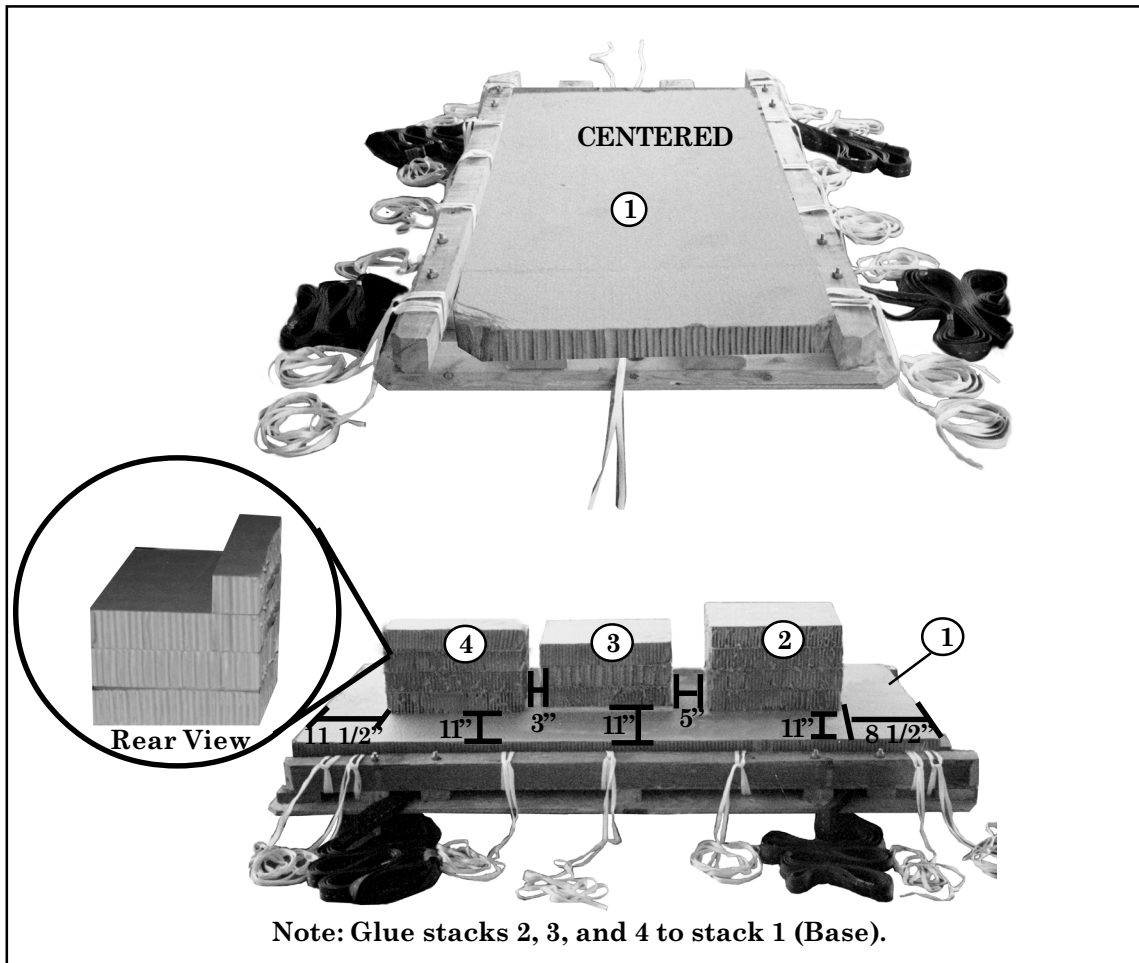


- ① Cut 16 lengths of 1/2-inch tubular nylon webbing 15 feet long.
- ② Girth hitch two lengths at each end of the 4-inch by 4-inch pieces of lumber.
- ③ Girth hitch three lengths of 1/2-inch tubular nylon at the center of each 4-inch by 4-inch piece of lumber.
- ④ At each end of the platform, pass one end of the 1/2-inch tubular nylon underneath the 2-inch by 6-inch longitudinal stringers. Match the two ends together and tie an overhead knot close to the stringer.
- ⑤ Number the 1/2-inch tubular ties 1 through 7 and 1a through 7a.

Figure 4-4. Load Restraints Secured to Platform

## POSITIONING HONEYCOMB STACKS

4-5. Prepare and position the honeycomb stacks as shown in *Figure 4-5*.

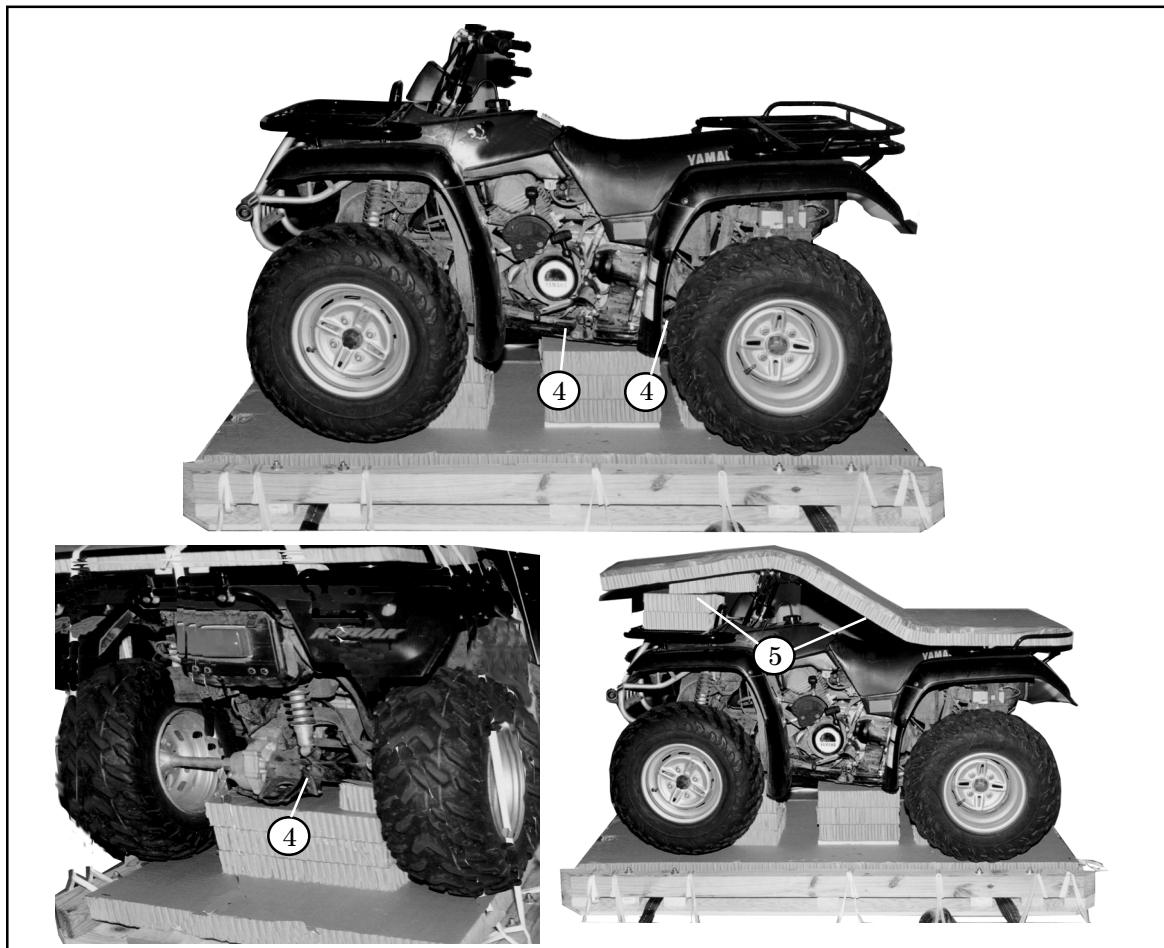


<u>STACK NUMBER</u>	<u>PIECES</u>	<u>WIDTH</u>	<u>LENGTH</u>	<u>MATERIAL</u>	<u>INSTRUCTIONS</u>
1	1	36	82	Honeycomb	See Figure 4-5.
2	4	14	18	Honeycomb	See Figure 4-5.
3	3	14	18	Honeycomb	See Figure 4-5. Glue to bottom of stack 3.
	1	14	18	3/4-inch Plywood	
4	3	14	18	Honeycomb	See Figure 4-5.
	1	4	18	Honeycomb	

Figure 4-5. Honeycomb Protectors Prepared and Tied to Motorcycles

## PREPARING AND POSITIONING QUAD-RUNNER

4-6. Prepare and position the quad-runner as shown in *Figure 4-6*.

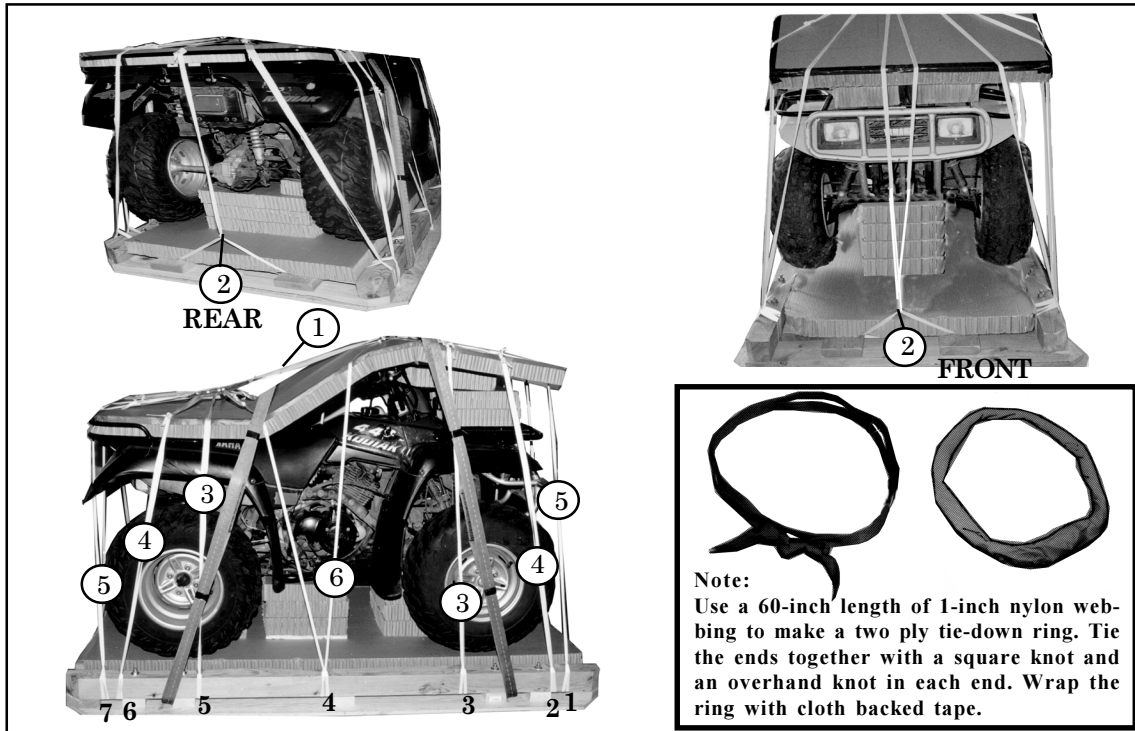


- ① Ensure fuel is over half but no more than 3/4 full. **(Not shown)**
- ② Secure key with type III cord safety tied to vehicle. **(Not shown)**
- ③ Place gear shift in neutral. **(Not shown)**
- ④ Position vehicle onto honeycomb with the front skid plate centered on stack two. Center skid plate rest on stack three. Rest axle on stack four. Wheels should be at least 1 inch above bottom layer of honeycomb.
- ⑤ Build up around the handlebars with honeycomb to prevent movement and to protect levers and switches. Lay a 36-inch by 78-inch piece of honeycomb, with edges taped, on top of the vehicle.

Figure 4-6. Quad-Runner Positioned

## SECURING LOAD TO PLATFORM

4-7. Form and tape with cloth backed tape two tie-down rings, approximately 10 inches in diameter, with 1-inch tubular nylon webbing. (**see note**) Lay one ring on top of the honeycomb over the handlebars and the other ring over the seat. Secure the load to the platform as shown in *Figure 4-7*.



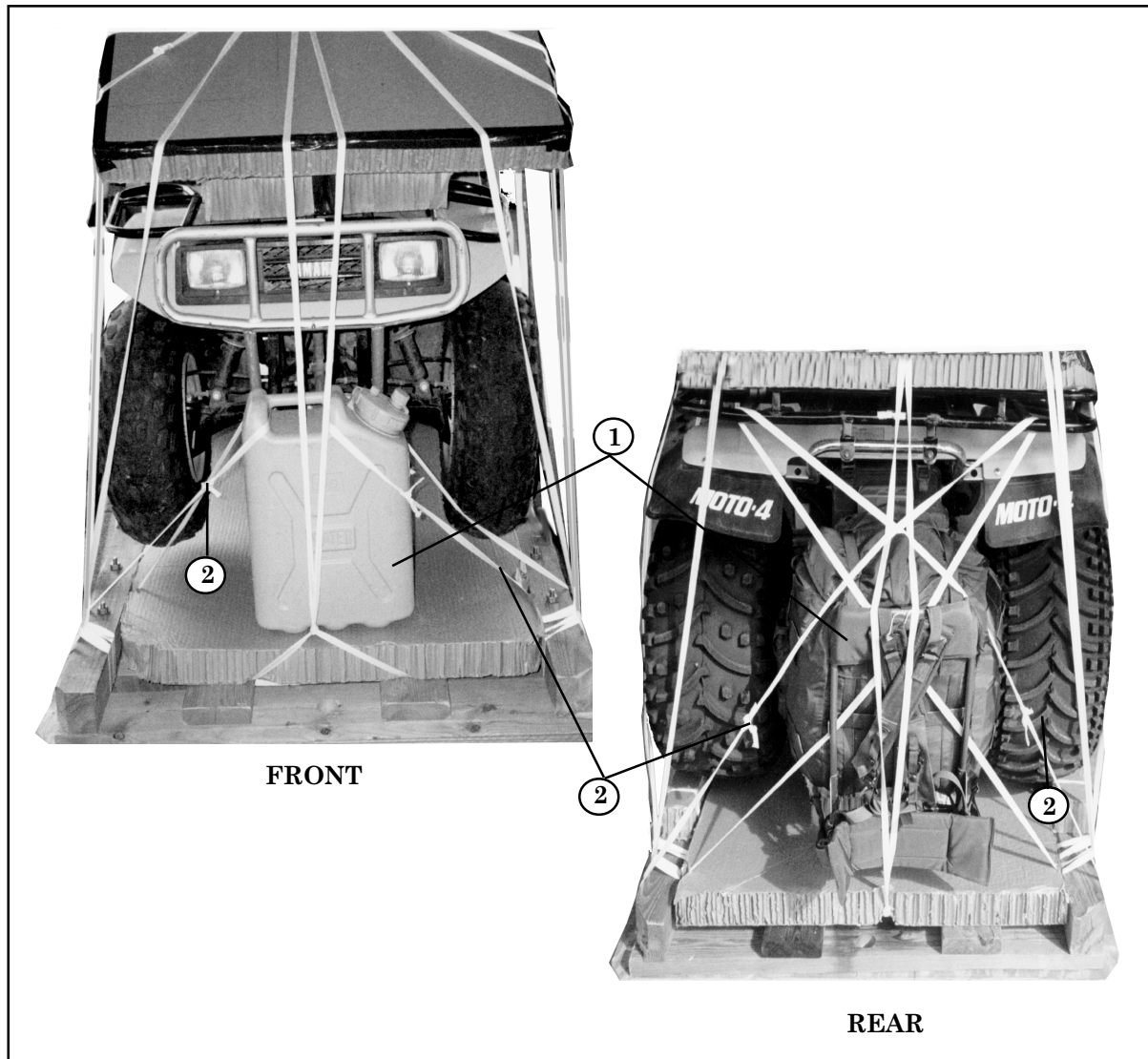
- ① Tie the rings together with a 40 inch length of 1/2-inch tubular nylon webbing to keep them centered.
- ② Tie the front and rear restraints of each end to the respective tie-down ring with a trucker's hitch knot.
- ③ Tie numbers 5 and 5a and 3 and 3a to the respective tie-down ring.
- ④ Tie numbers 6 and 6a and 2 and 2a to the respective tie-down ring.
- ⑤ Route numbers 7 and 7a and 1 and 1a around each end of the vehicle and up to the tie-down rings.
- ⑥ Using numbers 4 and 4a, split the tie and then tie one end to one tie-down ring and the other end to the other tie-down ring.

Figure 4-7. Quad-Runner Positioned



## SECURING ACCOMPANYING LOAD

4-8. Whenever possible, the load should be kept balanced. One rucksack and one water or fuel can may be used to keep the load balanced as shown in *Figure 4-8*.



- ① Place the water or fuel can between the front wheels. Place the rucksack on the honey-comb between the rear wheels.
- ② Secure to the load by girth hitching 1/2-inch tubular nylon webbing to the CEP.

Figure 4-8. Accompanying Load Secured

## SAFETYING SUSPENSION SLINGS

4-9. Lift and safety the suspension slings using a deadman's tie according to *FM 10-500-2/TO 13C7-1-5* and as shown in *Figure 4-9*.

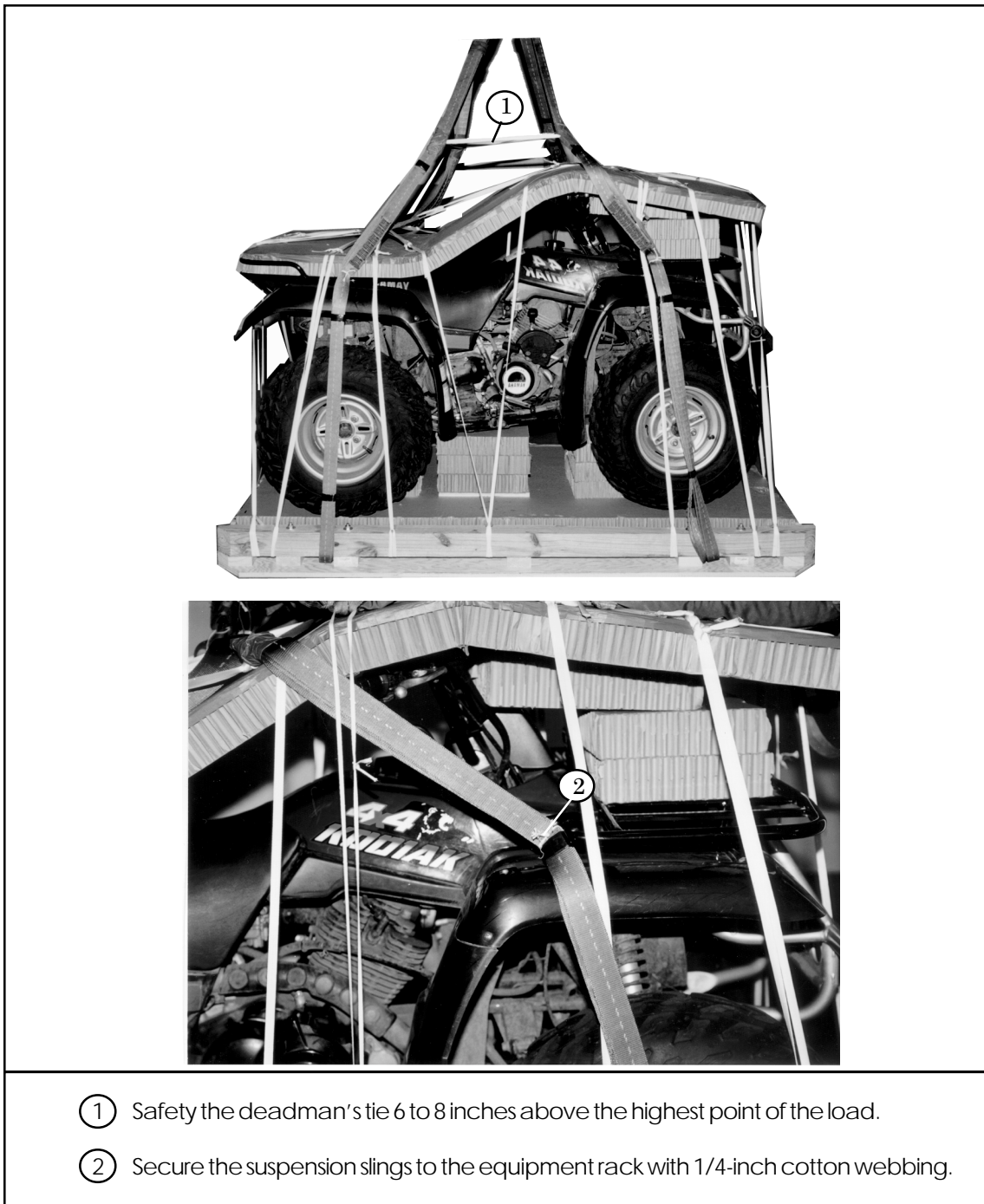
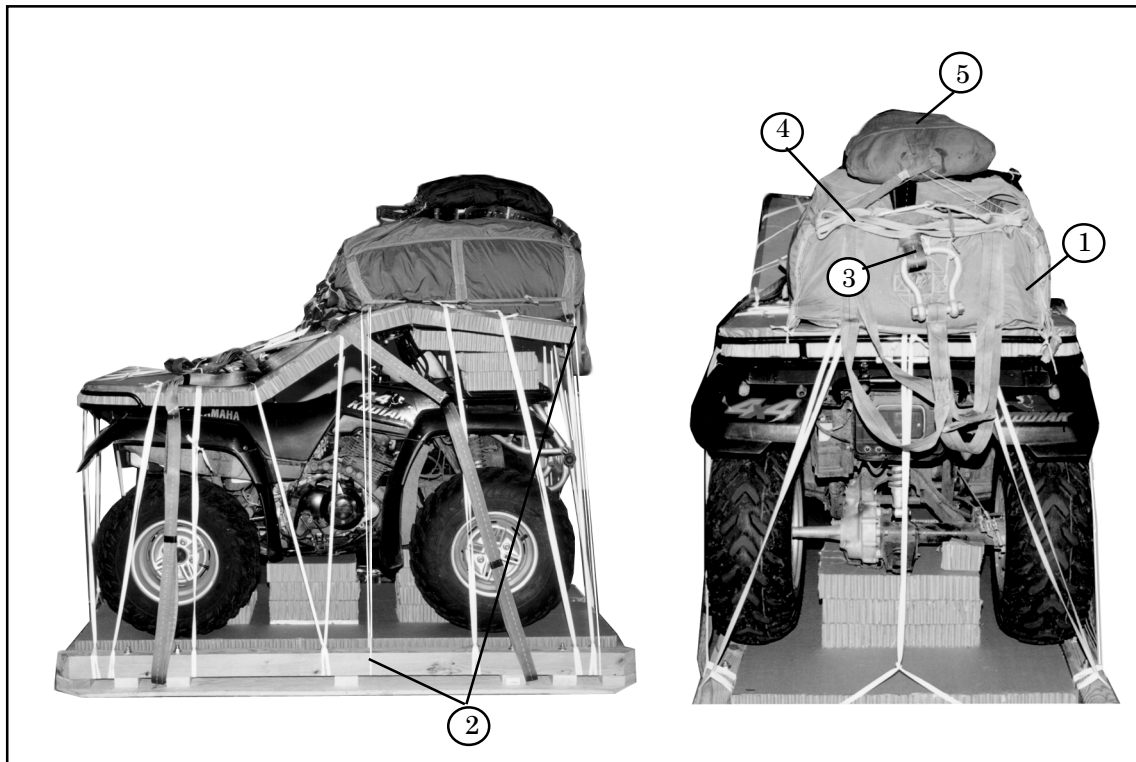


Figure 4-9. Suspension Slings Safetied

## STOWING CARGO PARACHUTE

4-10. Stow one G-12E cargo parachute as shown in *Figure 4-10*. Prepare and pack a 15-foot cargo extraction parachute as described in *Chapter 3, Paragraph 3-8*.



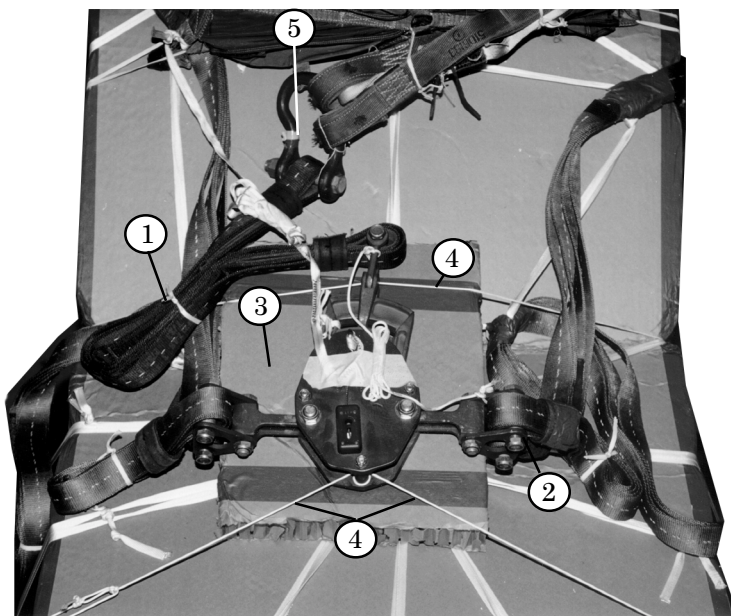
- ① Place one G-12E cargo parachute on the front of the load with the riser extension compartment up and the deployment bag bridle to the front.
- ② Secure the parachute to convenient points on the platform with four lengths of 1/4-inch cotton webbing.
- ③ Attach the deployment line (9-foot, 2-loop Type XXVI nylon webbing sling) from the packed 15-foot extraction parachute to the G-12E bridle with a medium clevis.
- ④ S-fold the slack in the deployment line and secure the folds with 1/4-inch cotton webbing. Secure the medium clevis attached to the G-12E bridle to the riser extension tie-down loops with a single length of 1/4-inch cotton webbing. Place folds on top of the G-12E cargo parachute.
- ⑤ Center the 15-foot cargo extraction parachute on top of the G-12E cargo parachute. Secure to the G12E with four lengths of ticket number 8/7 cotton thread.

Figure 4-10. Parachute Stowed



## INSTALLING PARACHUTE RELEASE

4-11. Prepare, install, and safety the M-1 release according to *FM 10-500-2/TO 13C7-1-5* and as shown in *Figure 4-11*.



- ① Connect a 3-foot, 2-loop Type XXVI sling to the G-12E parachute riser clevis. Connect the other end of the sling to the parachute connector on the M-1 release. Fold and tie with 1/4-inch cotton webbing.
- ② Connect the suspension slings to the M-1 release.
- ③ Cut and place a 14- by 14- inch piece of honeycomb on top of the load under the release.
- ④ Secure the M-1 release to the platform with Type III nylon cord.
- ⑤ Remove the left secondary bag closing tie from the G-12E parachute.

Figure 4-11. M-1 Parachute Release Installed

## MARKING RIGGED LOAD

4-12. Mark the rigged load according to *FM 10-500-2/TO 13C7-1-5* and as shown in *Figure 4-12*. If the accompanying load varies from the one shown, the weight, height, and CB must be recomputed. Complete the Shipper's Declaration for Dangerous Goods.



### RIGGER LOAD DATA

<b>Weight: Load Shown</b>	<b>960 pounds</b>
<b>Maximum Load Allowed</b>	<b>1200 pounds</b>
<b>Height</b>	<b>68 inches</b>
<b>Length</b>	<b>87 inches</b>
<b>Width</b>	<b>48 inches</b>

Figure 4-12. Four Wheeled Quad-Runner Rigged on CEP for Low-velocity Airdrop

**EQUIPMENT REQUIRED**

4-13. The equipment needed to prepare and rig this load is listed in *Table 4-1*.

**Table 4-1. Equipment Required for Rigging Quad-Runner for Low-Velocity Airdrop**

<b>National Stock Number</b>	<b>Item</b>	<b>Quantity</b>
8040-00-273-8713	Adhesive, paste, 1-gallon	As required
1670-00-590-9909	*Bag, deployment, personnel parachute (T10)	1
1670-00-568-0323	*Band, rubber, retainer	As required
No NSN	Bolt, carriage, 3/8-inch diameter, 7-inch long, w/washer and nut	8
4030-00-678-8562	Clevis, assembly, suspension, cargo (Medium)	2
4020-00-240-2146	Cord, nylon, Type III, 550-lb Lumber:	As required
5510-00-220-6446	2- by 4- by 44-inch	5
5510-00-220-6148	2- by 6- by 87-inch	2
	2- by 6- by 44-inch	2
5510-00-220-6274	4- by 4- by 87-inch	2
5315-00-010-4659	Nail, steel wire, common, 8d	As required
1670-00-753-3928	Pad, energy-dissipating honeycomb, 3- by 36- by 96-inch	5
	36- by 82-inch	(2)
	36- by 78-inch	(1)
	14- by 18-inch	(10)
	Parachute:	
1670-01-065-3755	Cargo, G-12E	1
1670-01-063-3715	*Cargo, extraction, 15-foot	1
5530-00-128-4981	Plywood:	
	3/4- by 48- by 87-inch	1
	14- by 18-inch	1
	Sling, cargo, airdrop, Type XXVI, nylon webbing:	
1670-01-062-6301	3-foot (2-loop)	1
1670-01-062-6304	*9-foot (2-loop)	1
1670-01-062-6302	20-foot (2-loop)	2

**\*These items are needed to pack the 15-foot cargo extraction parachute.**

Table 4-1. Equipment Required for Rigging Quad-Runner for Low-Velocity Airdrop  
(Continued)

National Stock Number	Item	Quantity
1670-01-097-8816	Release, cargo parachute, M-1	1
8310-00-917-3945	Thread, cotton, number 8/7 cord	As required
7510-00-266-5016	Tape, adhesive, 2-inch (Cloth back)	As required
	Webbing:	
8305-00-268-2411	Cotton, Type I, 1/4-inch	As required
8305-00-268-2453	Nylon, tubular, 1/2-inch, 1,000-lb	As required
8305-00-268-2455	Nylon, tubular, 1-inch	As required
8305-00-263-3591	Nylon, type VIII	As required

## SECTION I I

### RIGGING ONE FOUR WHEELED QUAD-RUNNER IN A DOUBLE A-22 CONTAINER

#### DESCRIPTION OF LOAD

4-14. The four wheeled quad-runner (QUAD) may also be rigged in a double A-22 container. The load is rigged on a 48-by 96-inch Combat Expendable Platform (CEP) with one G12-E cargo parachute. The load is rigged for a low velocity air-drop, using over the ramp or the Centerline Vertical Restraint system (CVR) from a C-130, C-141, or C-17 aircraft.

#### BUILDING AND PREPARING COMBAT-EXPENDABLE PLATFORM

4-15. Build and prepare the CEP as shown in *Paragraph 3-2, Pages 3-1 through 3-12*.

#### POSITIONING AND JOINING A-22 SLING ASSEMBLY

4-16. Position and join A-22 sling assembly as shown in *Paragraph 3-3, Page 3-3*.

#### POSITIONING A-22 CARGO COVERS

4-17. Position A-22 cargo cover as described in *Paragraph 3-4, Page 3-5*.  
(Use steps 1 and 2 only)

#### PREPARING AND POSITIONING HONEYCOMB

4-18. Prepare and position honeycomb as shown in *Paragraph 4-5, Page 4-6*.  
**Note: Stack number 1 dimensions are 36- by 96-inches for a quad rigged in an A-22 container.**

## **PREPARING, POSITIONING AND PROTECTING QUAD**

4-19. Prepare, position, and protect quad as shown in *Paragraph 4-6, Page 4-7*. **Note: Place a 36 by 82-inch piece of honeycomb on each side of the quad and secure with type III nylon cord.**

## **CLOSING CARGO BAGS**

4-20. Close cargo bags as shown in *Paragraph 3-6, Page 3-8*.

## **ATTACHING SUSPENSION SLINGS**

4-21. Attach suspension slings as shown in *Paragraph 3-7, Page 3-12*.

## **PACKING A 15-FOOT CARGO EXTRACTION PARACHUTE**

4-22. Pack a 15-foot cargo extraction parachute as shown in *Paragraph 3-8, Page 3-13*.

## **PREPARING AND STOWING G-12E CARGO PARACHUTE AND 15-FOOT CARGO EXTRACTION PARACHUTE**

4-23. Prepare and stow the G-12E cargo and 15-foot cargo extraction parachutes as described in *Paragraph 3-9, Page 3-19*.

**EQUIPMENT REQUIRED**

4-24. The equipment needed to prepare and rig this load is listed in Table 4-2.

Table 4-2. Equipment Required for Rigging Quad-Runner in an A-22 Container

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gallon	As required
1670-00-587-3421	A-22 cargo bag	2
1670-00-568-0323	*Band, rubber, retainer	As required
4030-00-678-8562	Clevis, assembly, suspension, cargo	4
4020-00-240-2146	Cord, nylon, Type III, 550-lb	As required
	Lumber:	
5510-00-220-6148	2- by 6- by 42-inch	2
	2- by 6- by 85-inch	2
5315-00-010-4659	Nail, steel wire, common, 8d	As required
	Parachute:	
1670-01-065-3755	Cargo, G-12E	1
1670-01-063-3715	*Cargo, extraction, 15-foot	1
5530-00-128-4981	Plywood:	
	3/4- by 48- by 96-inch	1
	14- by 18-inch	1
	Sling, cargo, airdrop, Type XXVI, nylon webbing:	
1670-01-062-6301	3-foot (2-loop)	2
1670-01-062-6304	*9-foot (2-loop)	1
7510-00-266-5016	Tape, adhesive, 2-inch (Cloth back)	As required
8310-00-917-3945	Thread, cotton, number 8/7 cord	As required
	Webbing:	
8305-00-268-2411	Cotton, Type I, 1/4-inch	As required
8530-00-268-2453	Nylon, tubular, 1/2-inch, 1,000-lb	As required
8530-00-263-3591	Nylon, type VIII	As required

\*These items are needed to pack the 15-foot cargo extraction parachute.

## GLOSSARY

AD	airdrop
AFB	Air Force base
AFJMAN	Air Force Joint Manual
AFJI	Air Force Joint instruction
AFI	Air Force instruction
AFTO	Air Force technical order
ALC	Airlift Logistics Center
attn	attention
C	change
cap	capacity
CEP	combat expendable platform
CB	center of balance
chap	chapter
cc	cubic centimeter
CVR	Container Vertical Restraint System
d	penny
DA	Department of the Army
DC	District of Columbia
DD	Department of Defense
diam	diameter
fig	figure
FM	field manual
ft	foot/feet
gal	gallon
HQ	headquarters
in	inch
JAI	joint airdrop inspector
lb	pound
LV	low-velocity
MCRP	Marine Corps Reference Publication
mm	millimeter
NSN	national stock number
OVE	on-vehicular equipment
TM	technical manual
TO	technical order
TRADOC	US Army Training and Doctrine Command
US	United States
w	with
yd	yard



## REFERENCES

- AR 59-4/AFJI 13-210. Joint Airdrop Inspection Records, Malfunction Investigations and Activity Reporting. 27 November 1984.
- \*AFJMAN 24-204/TM 38-250. Preparing Hazardous Materials for Military Air Shipments. 25 November 1994.
- FM 10-500-2/TO 13C7-1-5. Airdrop of Supplies and Equipment: Rigging Airdrop Platforms. 1 November 1990.
- FM 10-500-3/TO 13C7-1-11. Airdrop of Supplies and Equipment: Rigging Containers 8 December 1992.
- TM 10-1670-278-23&P/TO 13C5-26-2/NAVAIR 13-1-27/TM 01109C-23&P/1. Unit and Intermediate DS Maintenance Manual Including Repair Parts and Special Tools List for Parachute, Cargo Type, 15-ft Diam, Cargo Extraction. 6 November 1989.
- TM 10-1670-281-23&P/TO 13C5-32-2/NAVAIR 13-1-32. Unit and Intermediate Direct Soupport (DS) Maintenance Manual (Including Repair Parts and Special Tools List) for Parachute, Cargo Type: 64 Foot Diameter, Model G-12D, (NSN 1760-00-893-2371) and Model G-12E (1670-01-065-3755). 1 October 1990.
- TM 10-1670-298-20&P. Unit Maintenance Manual Including Repair Parts and Special Tools List for Container Delivery System A-7A Cargo Sling (1670-00-251-1153) A-21 Aerial Delivery Cargo Bag (1670-00-242-9173), A-22 Aerial Delivery Cargo Bag (1670-01-065-3748), Capsule, Cargo, CTU-2A (1670-01-059-5788), Strap Connector, 60-Inches Long (5340-00-738-5878), Strap Connector, 120-Inches Long (5340-00-738-5879). 15 September 1995.
- AFTO Form 22. Technical Order Publication Improvement Report
- DA Form 2028. Recommended Changes to Publication and Blank Forms. February 1974.
- \* Shipper's Declaration for Dangerous Goods. Locally procured form
- \*AFJMAN24-204/TM 38-250 has superseded AFR 71-4/TM 38-250 (15 January 1988). This revision reflects this change.
- \* Shipper's Declaration for Dangerous Goods has superseded DD Form 1387-2 (February 1982.) This revision reflects this change.