

**Section II**  
**RIGGING M151A2, 1/4-TON TRUCK (MISSILE CARRIER)**  
**AND SIX MISSILES**

**9-16. Description of Load**

The M151A2, 1/4-ton utility truck (missile carrier), with six encased missies, is rigged on a 12-foot, type V platform. It is rigged with two G-11A cargo parachutes or one G-11B cargo parachute. The six encased missiles are part of the basic load. This load can be airdropped from a C-130 or a C-141 aircraft.

**9-17. Preparing Platform**

Prepare a 12-foot, type V airdrop platform as described below.

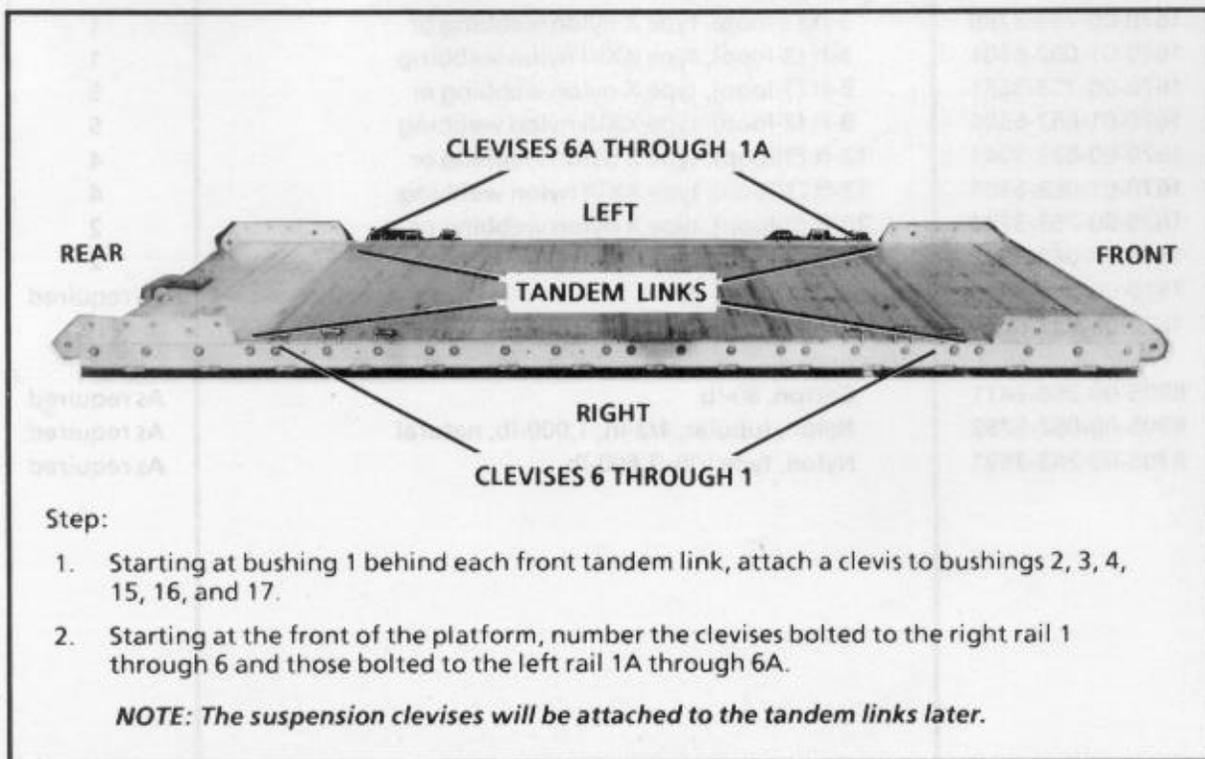
**a. Assembling and Inspecting Platform.** Inspect, or assemble and inspect, the platform as outlined in TM 10-1670-268-20 & P/TO 13C7-52-22.

**b. Installing Tandem Links.** Install a tandem link on the front and rear of each rail as shown in Figure 9-17.

**c. Attaching and Numbering Clevises.** Bolt 12 tiedown clevises to the side rail bushings according to TM 10-1670-268-20&P/TO 13C7-52-22. Number the clevises as shown in Figure 9-17.

**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. Starting at bushing 1 behind each front tandem link, attach a clevis to bushings 2, 3, 4, 15, 16, and 17.
2. Starting at the front of the platform, number the clevises bolted to the right rail 1 through 6 and those bolted to the left rail 1A through 6A.

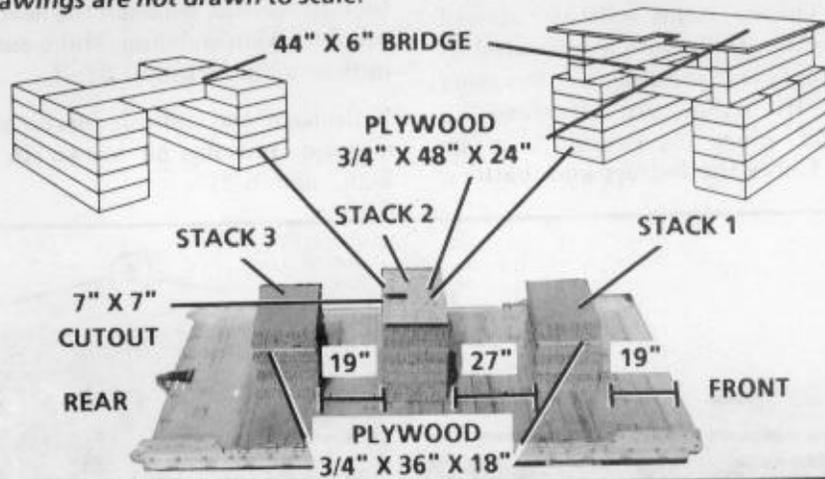
**NOTE:** The suspension clevises will be attached to the tandem links later.

*Figure 9-17. Platform prepared*

**9-18. Building and Placing Honeycomb Stacks**

Build the honeycomb stacks and place them on the platform as shown in Figure 9-18.

**NOTE:** The drawings are not drawn to scale.



Stack Number	Pieces	Width (Inches)	Length (Inches)	Material	Instructions
1	7	36	18	Honeycomb	Center honeycomb on the platform 19 inches from the front edge.
	1	36	18	3/4-inch plywood	Place plywood under the second layer of honeycomb from the top.
2	8	12	18	Honeycomb	Place four pieces of honeycomb on each side of the platform an equal distance from the side rail and 27 inches from stack 1.
	1	44	6	Honeycomb	Center honeycomb over the side stacks as a bridge.
	4	12	6	Honeycomb	Place one piece of honeycomb to each side of the side stacks on each side of the bridge.
	6	6	18	Honeycomb	Center three pieces of honeycomb on each side of the stack.
	1	48	24	3/4-inch plywood	Place plywood on top of stack with a 7- by 7-inch cutout centered on the rear.
3	7	36	18	Honeycomb	Center honeycomb on the platform 19 inches from stack 2.
	1	36	18	3/4-inch plywood	Place plywood under the second layer of honeycomb from the top.

Figure 9-18. Honeycomb stacks prepared and positioned

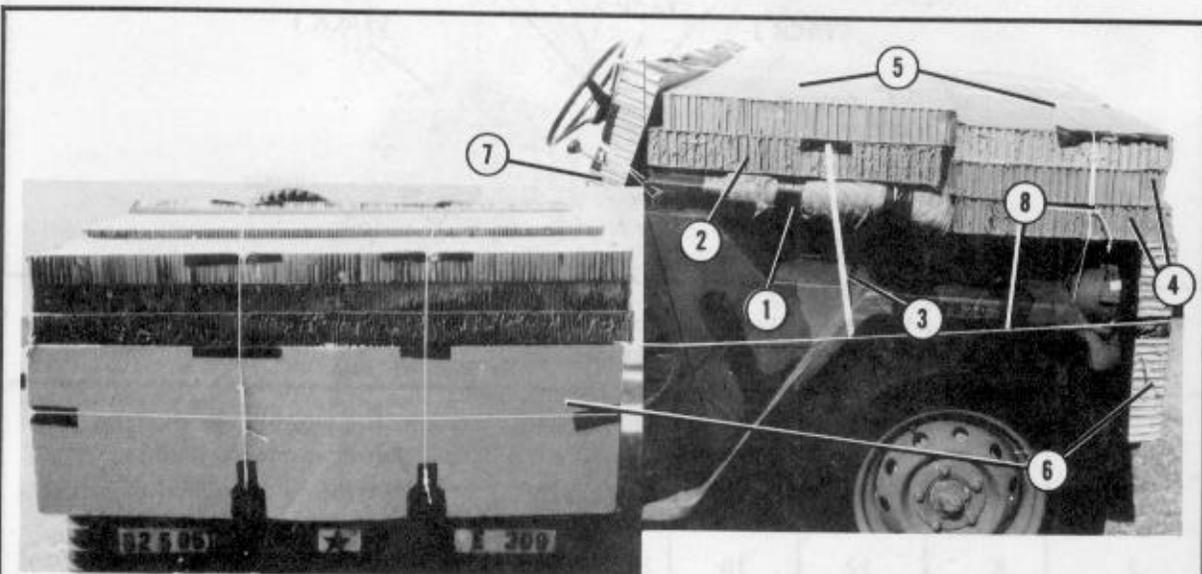
### 9-19. Preparing Missile Carrier and Stowing Missiles

Prepare the missile carrier and stow the missiles as described below.

a. Remove the doors, side curtains, top cover, and rear seat. These items will be stowed later. Make sure the front seats are secured. If the seat locking pins are missing, tie the seats down with type III nylon cord. Release the hand brake, and place the gearshift in the neutral position. Check the battery and battery

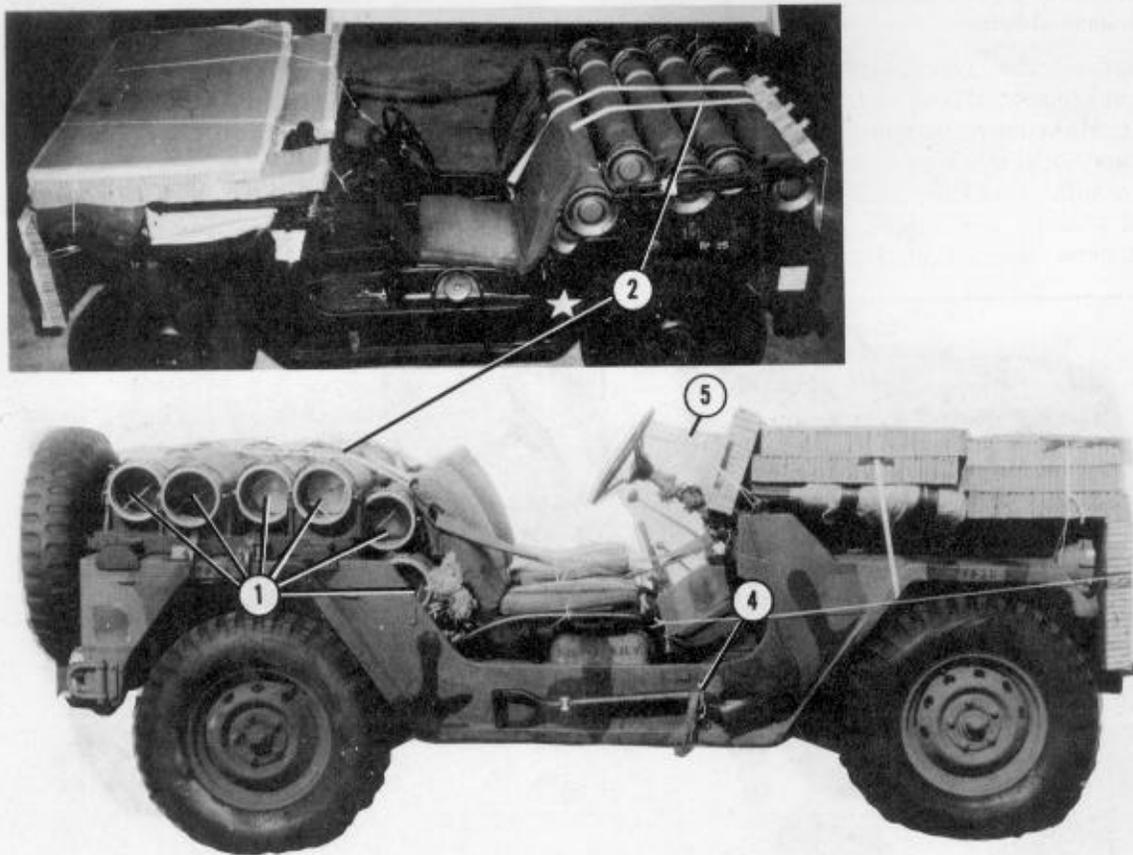
compartment, and prepare them according to FM 10-500-2/TO 13C7-1-5 and AFR 71-4/TM 38-250. If a spare battery is in the missile carrier, tie it in its rack between the seats with 1/2-inch tubular nylon webbing. Make sure that the fuel tank is not more than 1/2 full.

b. Prepare the missile carrier and stow the six encased missiles as shown in Figures 9-19, 9-20, and 9-21.



- 1 Wrap the windshield with cellulose wadding, and tape the wadding in place. Fold the windshield down. Secure it with hold-down straps.
- 2 Place a 24- by 61-inch piece of honeycomb on top of the windshield. Make a 6- by 9-inch cutout for the wiper motor and a 4- by 4-inch cutout for the rearview mirror.
- 3 Tie the honeycomb on the windshield with 1/2-inch tubular nylon webbing. Tie the webbing around the missile carrier frame on each side.
- 4 Place two 18- by 61-inch pieces of honeycomb on the hood of the missile carrier in front of the windshield.
- 5 If the honeycomb needs to be leveled, place an 18- by 61-inch piece of honeycomb on top of the honeycomb positioned in step 2. Place a 24- by 61-inch piece of honeycomb on top of the honeycomb positioned in step 4.
- 6 Place an 18- by 61-inch piece of honeycomb with two 4- by 7-inch cutouts for the front lifting shackles on the front bumper.
- 7 Set a 12- by 61-inch piece of honeycomb on the steering column and against the dash.
- 8 Tie the honeycomb to convenient places on the missile carrier with type III nylon cord. Tape the honeycomb edges where the type III nylon cord touches.

Figure 9-19. Front of missile carrier prepared



① Position six encased missiles in their racks, and secure them with the straps provided or 1/2-inch tubular nylon webbing. Safety the rack in place with two ties of type III nylon cord.

② Pass a 15-foot tiedown strap around the inside rear braces of the seats, over the missiles, and under the towing pintle. Secure it with a D-ring and a load binder.

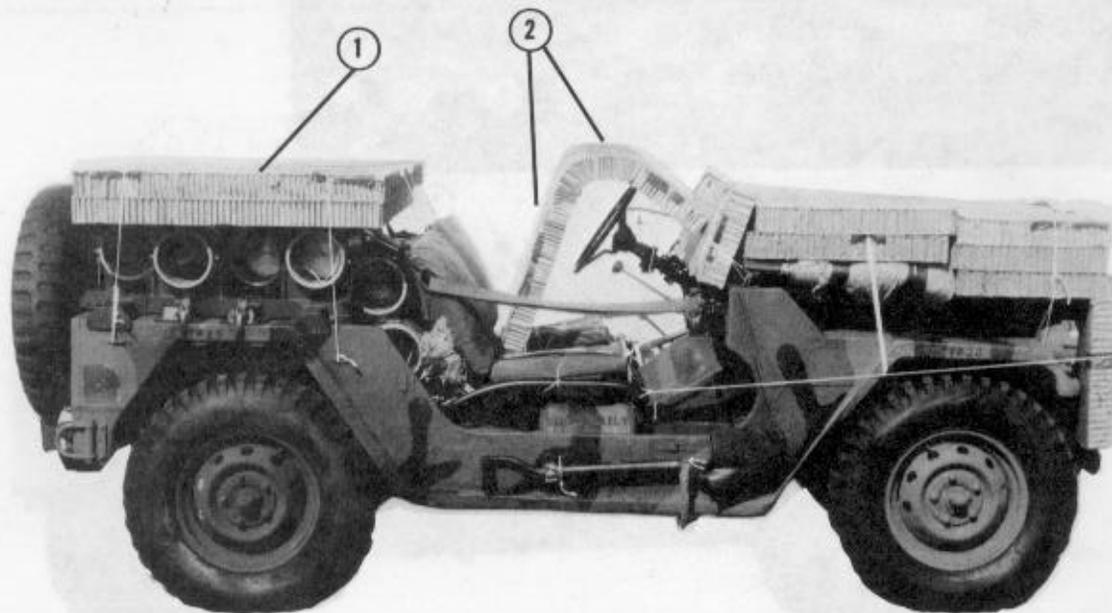
**NOTE:** *If rigging a vehicle with top frame bows, secure them together with the straps provided and tape them. Safety them with type III nylon cord. Tape a 4- by 26-inch piece of honeycomb between the top frame and last missile.*

③ Pad the side mirror with cellulose wadding. Turn the mirror down against the body, and tape it in place (not shown).

④ Place the pioneer tools in their racks, and secure the tools with their tiedown straps. Safety the tools in place using type III nylon cord.

⑤ Tie the steering wheel to the left windshield hinge bracket with a length of 1/2-inch tubular nylon webbing or doubled type III nylon cord.

Figure 9-20. Six missiles stowed



- 1 Place two 36- by 61-inch pieces of honeycomb on the missiles. Safety the honeycomb in place with three ties of type III nylon cord. Tape the honeycomb edges where the type III nylon cord touches.
- 2 Place a 36- by 50-inch piece of honeycomb over the steering wheel. Make knife cuts across the underside of the honeycomb at the top of the steering wheel to allow the honeycomb to bend. Fold the top of the honeycomb down against the steering wheel column and the honeycomb on the dash. Tie the steering wheel protector in place with type III nylon cord. Tape the honeycomb edges where the type III nylon cord touches.

Figure 9-21. Honeycomb secured over missiles and steering wheel

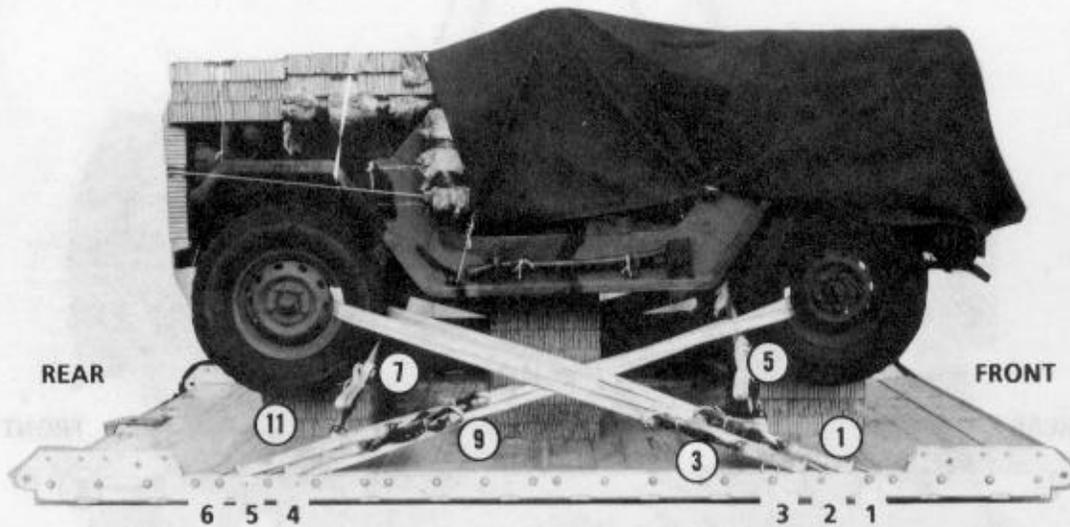
**9-20. Positioning Missile Carrier**

Bolt a 9-foot (3-loop), type X nylon sling to each wheel with a load tiedown clevis or a small suspension clevis. Place the missile carrier on the honeycomb stacks with the rear edge of the missile carrier even with the front edge of the platform. Remove the 9-foot slings.

**9-21. Lashing Missile Carrier**

Lash the missile carrier to the platform with twelve 15-foot tiedown assemblies as shown in Figure 9-22.

**NOTE:** Pad all sharp edges that may touch the lashings.



Lashing Number	Tiedown Clevis Number	Instructions
1	1	Pass lashing: Through left front wheel.
2	1A	Through right front wheel.
3	2	Through left front wheel.
4	2A	Through right front wheel.
5	3	Around inner left rear suspension arm.
6	3A	Around inner right rear suspension arm.
7	4	Around inner left front suspension arm.
8	4A	Around inner right front suspension arm.
9	5	Through left rear wheel.
10	5A	Through right rear wheel.
11	6	Through left rear wheel.
12	6A	Through right rear wheel.

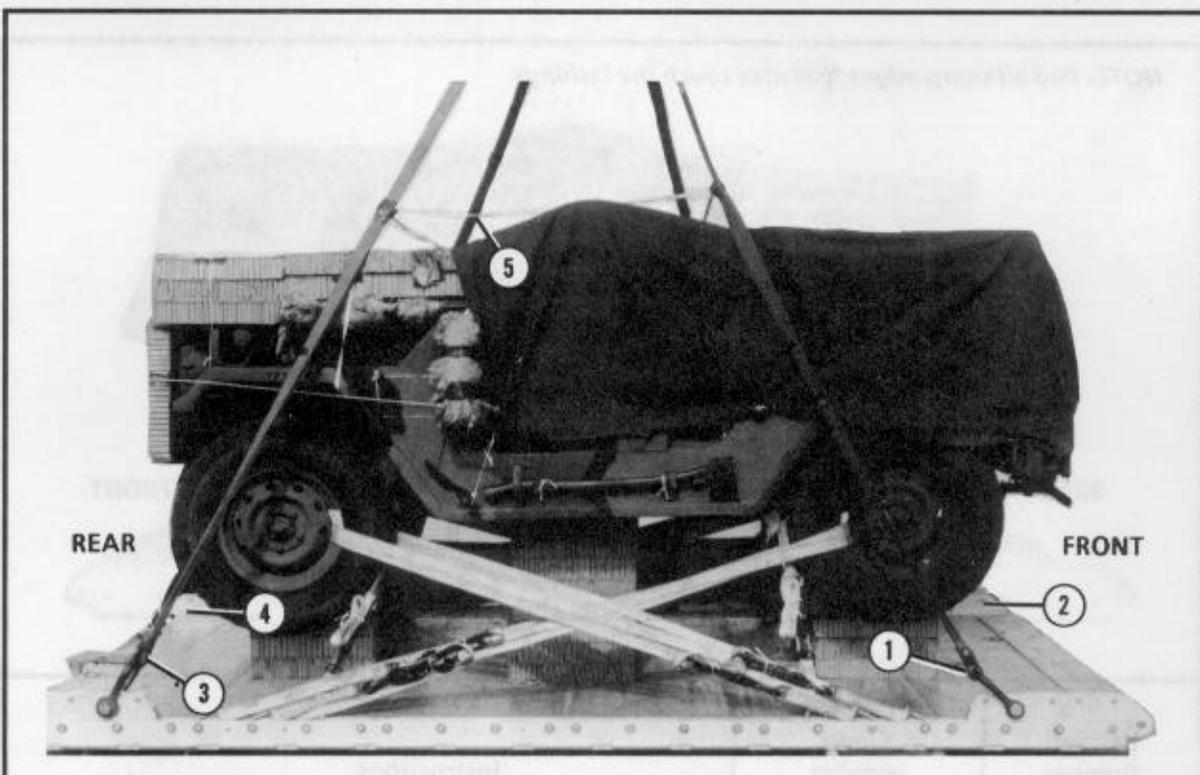
Figure 9-22. Lashings installed

### 9-22. Installing Load Cover

Cover the load with a 10-by 10-foot piece of duck cloth. Tie the corners of the cover to convenient places on the missile carrier with type III nylon cord.

### 9-23. Attaching Suspension Slings and Deadman's Tie

Install suspension slings using four 12-foot (2-loop), type XXVI nylon slings and four large clevises as shown in Figure 9-23.

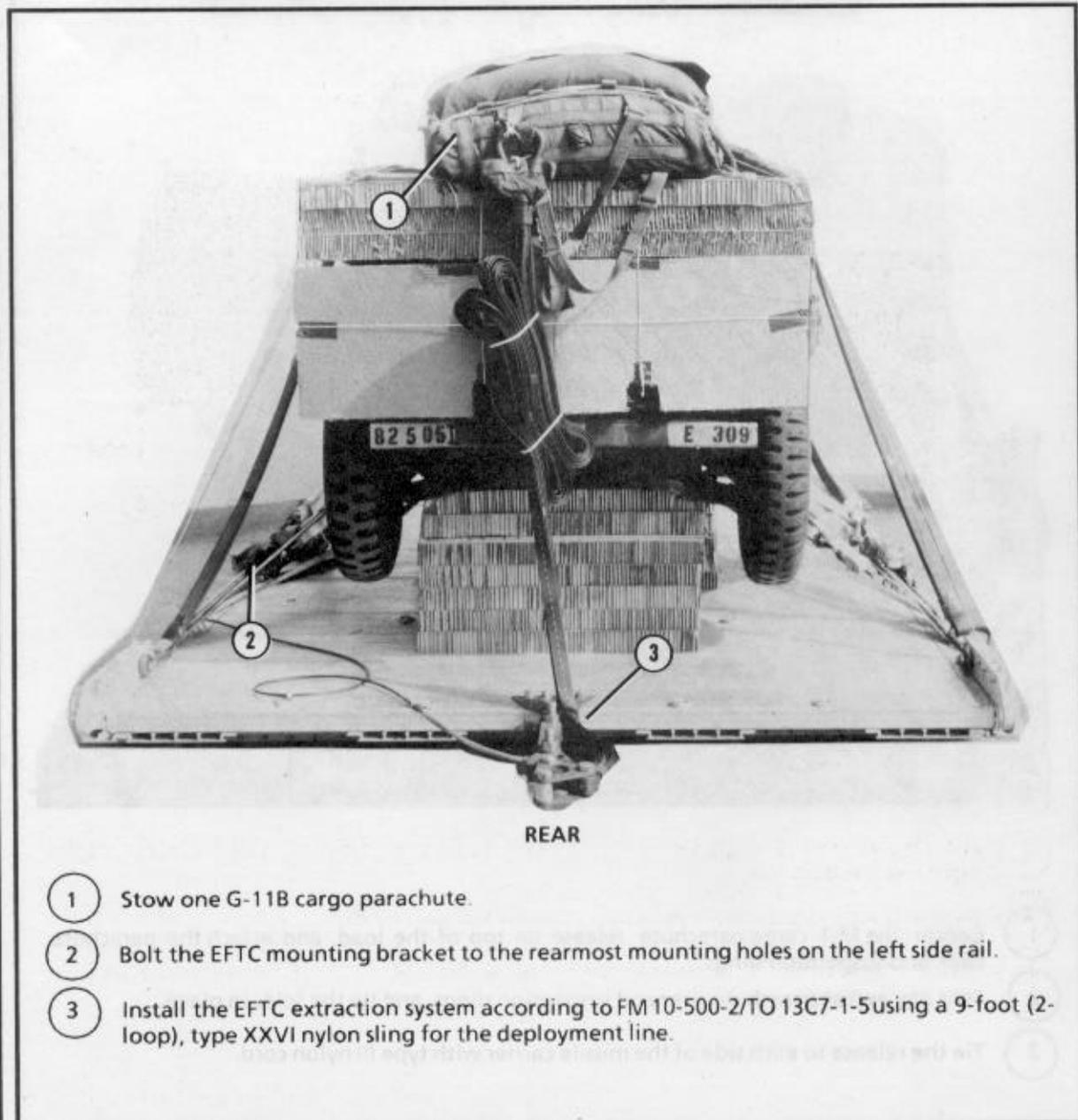


- 1 Attach a 12-foot (2-loop), type XXVI nylon sling to a large clevis. Hook the clevis to the right front tandem link.
- 2 Repeat the same procedure as in step 1 for the left front tandem link.
- 3 Attach a 12-foot (2-loop), type XXVI nylon sling to a large clevis. Hook the clevis to the right rear tandem link.
- 4 Repeat the same procedure as in step 3 for the left rear tandem link.
- 5 Install the deadman's tie as outlined in FM 10-500-2/TO 13C7-1-5, but with the tie flush with the top of the load.

Figure 9-23. Suspension slings installed and safetied

### 9-24. Stowing Cargo Parachutes and Installing Extraction System

Prepare and stow two G-11A parachutes or one G-11B cargo parachute as outlined in FM 10-500-2/TO 13C7-1-5 and as shown in Figure 9-24. Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 9-24.



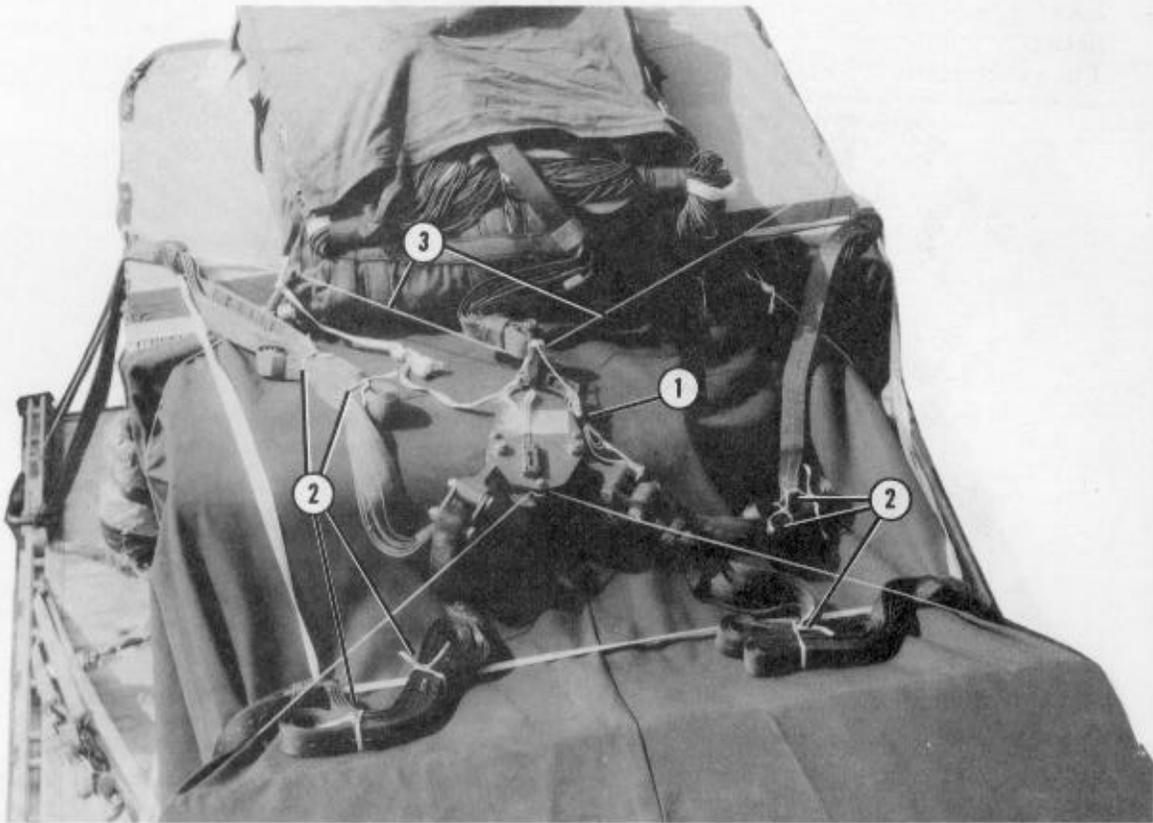
- 1 Stow one G-11B cargo parachute.
- 2 Bolt the EFTC mounting bracket to the rearmost mounting holes on the left side rail.
- 3 Install the EFTC extraction system according to FM 10-500-2/TO 13C7-1-5 using a 9-foot (2-loop), type XXVI nylon sling for the deployment line.

Figure 9-24. Cargo parachute stowed and EFTC extraction system installed

### 9-25. Installing Release System

Prepare and attach an M-1 cargo parachute release according to FM 10-500-2/TO 13C7-1-5 and as shown in Figure 9-25.

**CAUTION**  
THE M-1 CARGO PARACHUTE RELEASE MUST BE USED WITH THE G-11B CARGO PARACHUTE.



- 1 Center the M-1 cargo parachute release on top of the load, and attach the parachute riser and suspension slings.
- 2 Fold any excess parachute riser and suspension slings, and tie the folds in place.
- 3 Tie the release to each side of the missile carrier with type III nylon cord.

Figure 9-25. M-1 cargo parachute release installed

**9-26. Placing Extraction Parachute**

Place the extraction parachute as described below.

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

b. **C-141 Aircraft.** Place an unreefed 15-foot cargo extraction parachute with a 36-inch adapter web and a continuous 160-foot (1-loop), type XXVI nylon extraction line on the load for installation in the aircraft. The extraction line **MUST** be a continuous 160-foot line.

**9-27. Installing Emergency Restraints**

Install a medium clevis in the front hole of each tandem link as an emergency restraint.

**9-28. Marking Rigged Load**

Mark the rigged load as outlined in FM 10-500-2/TO 13C7-1-5 and as shown in Figure 9-26. Complete DD Form 1387-2, and securely attach it to the load. Indicate on DD Form 1387-2 that the vehicle fuel tank and battery have been prepared according to AFR 71-4/TM 38-250. If the load varies from that shown, the weight, CB, and parachute requirements must be recomputed.



*Figure 9-26. M151A2 truck and six missiles rigged for low-velocity airdrop on a type V airdrop platform*

**9-29. Equipment Required**

Use the equipment listed in Table 9-2 to rig this load.

*Table 9-2. Equipment required for rigging the M151A2 truck and six missiles for low-velocity airdrop on a type V platform*

National Stock Number	Item	Quantity
1670-01-062-6312	Adapter web, 36-in (for 15-ft parachute)	1
8040-00-273-8713	Adhesive, paste, 1-gal	As required
	Clevis, suspension:	
4030-00-678-8562	3/4-in (medium)	4
4030-00-090-5354	1-in (large)	3
8305-00-242-3593	Cloth, cotton duck, 60-in	8 yd
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
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
5365-00-937-0147	D-ring, heavy-duty, 10,000-lb	13
8305-00-958-3685	Felt, 1/2- by 6- by 6-in	1
	Line, extraction:	
1670-01-064-4452	60-ft (1-loop), type XXVI nylon webbing (for C-130) or	1
1670-00-856-0265	60-ft (1-loop), type X nylon webbing (for C-130)	1
1670-01-107-7652	160-ft (1-loop), type XXVI nylon webbing (for C-141)	1
1670-00-783-5988	Link assembly, type IV (for extraction line)	1
1670-00-217-2421	Link, L-bar type	1
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	10 sheets
	4- by 26-in	(1)
	6- by 18-in	(6)
	12- by 6-in	(4)
	12- by 18-in	(8)
	12- by 61-in	(1)
	18- by 61-in	(4)
	24- by 61-in	(2)
	36- by 18-in	(14)
	36- by 50-in	(1)
	36- by 61-in	(1)
	44- by 6-in	(1)
1670-01-183-2678	Panel, sling, extraction line	2
	Parachute:	
	Cargo:	
1670-00-269-1107	G-11A or	2
1670-01-016-7841	G-11B	1

Table 9-2. Equipment required for rigging the M151A2 truck and six missiles for low-velocity airdrop on a type V platform (continued)

National Stock Number	Item	Quantity
1670-00-052-1548	Cargo extraction: 15-ft (unreefed)	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	12
1670-01-162-2376	Extraction bracket assembly	1
1670-01-162-2381	Tandem link	4
5530-00-128-4981	Plywood, 3/4-in:	
	24- by 44-in	1
	24- by 48-in	1
	36- by 18-in	2
1670-01-097-8816	Release, cargo parachute, M-1	1
	Sling, cargo, airdrop:	
1670-00-753-3788	3-ft (3-loop), type X nylon webbing or	1
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	1
1670-00-753-3631	9-ft (3-loop), type X nylon webbing or	5
1670-01-062-6304	9-ft (2-loop), type XXVI nylon webbing	5
1670-00-823-5041	12-ft (3-loop), type X nylon webbing or	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 or	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, 10,000-lb	13
	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