

INSTALLING AND SAFETY TYING SUSPENSION SLINGS

4-7. Install and safety tie four 16-foot (2-loop), type XXVI nylon suspension slings as shown in Figure 2-20.

STOWING CARGO PARACHUTES

4-8. Stow and restrain three G-11 cargo parachutes on the load according to FM 4-20.102/TO 13C7-1-5. Install two type VIII nylon webbing restraint straps. Tie the front restraint straps to clevises 8 and 8A. Tie the rear restraint straps to the 27th bushings on the platform side rails.

INSTALLING PARACHUTE RELEASE

4-9. Prepare and install an M-1 cargo parachute release according to FM 4-20.102/TO 13C7-1-5, and as shown in Figure 2-22 .

INSTALLING EXTRACTION SYSTEM

4-10. Install the EFTC extraction system according to FM 4-20.102/TO 13C7-1-5, and as shown in Figure 2-23.

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

4-11. Install provisions for emergency restraints according to FM 4-20.102/TO 13C7-1-5.

PLACING EXTRACTION PARACHUTE

4-12. Select the extraction parachute and extraction line needed, using the extraction line requirements table in FM 4-20.102/TO 13C7-1-5. Rig the extraction line in a line bag according to TM 10-1670-286-20/TO 13C5-2-41. Place the extraction parachute and extraction line on the load for installation in the aircraft.

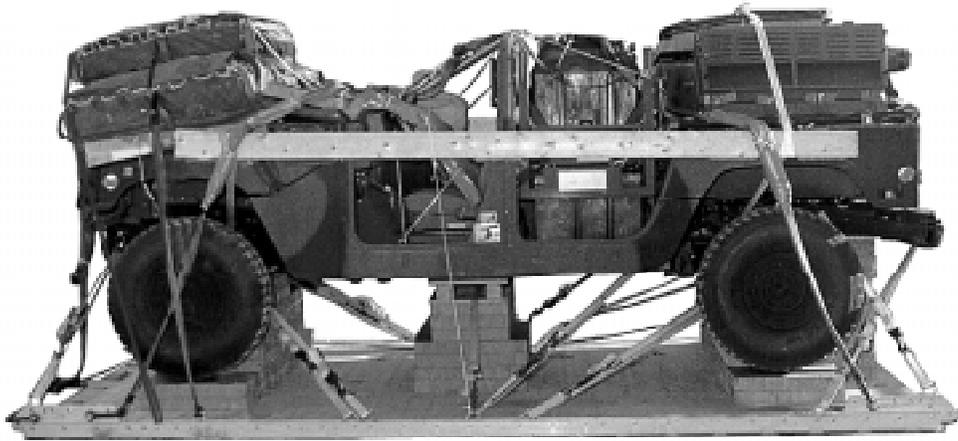
MARKING RIGGED LOAD

4-13. Mark the rigged load according to FM 4-20.102/TO 13C7-1-5, and as shown in Figure 4-14. Complete Shipper's Declaration for Dangerous Goods according to AFJMAN 24-204/TM 38-250. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

EQUIPMENT REQUIRED

4-14. Use the equipment listed in Table 4-1 to rig this load.

CAUTION
Make the final rigger inspection required by FM 4-20.102/ TO 13C7-1-5 before the load leaves the rigging site.





RIGGED LOAD DATA	
Weight: Load shown	11,960 pounds
Maximum load allowed	12,710 pounds
Height (with three G-11B parachutes)	97 inches
Width	108 inches
Length (overall)	215 inches
Overhang: Front	8 inches
Rear (EFTC)	18 inches
CB (from front edge of platform)	91 inches

Figure 4-14. M56 Smoke Generator Rigged in M1113 Truck for Low-Velocity Airdrop

Table 4-1. Equipment Required for Rigging the M1113 truck with M56 Smoke Generator 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 assembly, airdrop, extraction force transfer with cable, 16-ft	1
1670-00-360-0328	Cover, clevis, large	1
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-958-3685	Felt, 1/2-in thick	As required
1670-01-183-2678	Leaf, extraction line (line bag)	2
1670-01-064-4452	Line, drogue (for C-17) 60-ft (3-loop), type XXVI	1
1670-01-062-6313	Line, extraction: For C-130: 60-ft (3-loop), type XXVI	1
1670-01-107-7651	For C-141: 140-ft (3-loop), type XXVI	1
1670-01-062-6313	For C-5: 60-ft (3-loop), type XXVI and	1
1670-01-107-7651	140-ft (3-loop), type XXVI	1
1670-01-107-7651	For C-17: 140-ft (3-loop), type XXVI	1
5306-00-435-8994	Link assembly, Two-point: Bolt, 1-in diam, 4-in long	1 (2)
5310-00-232-5165	Nut, 1-in, hexagonal	(2)
1670-00-003-1953	Plate, side, 3 3/4-in	(2)
5365-00-007-3414	Spacer, large	(2)
5510-00-220-6448	Lumber: 2- by 6-in	As required
5510-00-220-6274	4- by 4-in	As required
5315-00-010-4659	Nail, steel wire, 8d	As required

Table 4-1. Equipment Required for Rigging the M1113 Truck with M56 Smoke Generator for Low-Velocity Airdrop (continued)

National Stock Number	Item	Quantity
1670-00-753-3928	Pad, energy-dissipating (honeycomb) 3- by 36- by 96-in	13 sheets
1670-01-016-7841	Parachute: Cargo: G-11B	3
1670-01-063-3716	Cargo extraction: 22-foot ((for C-17, use H-block with this parachute)	1
1670-01-063-3715	Drogue (for C-17) 15-ft	1
1670-01-353-8425	Platform, airdrop, type V, 16-ft Bracket assembly, EFTC	(1)
1670-01-162-2372	Clevis assembly, type V	(20)
1670-01-353-8424	Bracket assembly, extraction	(1)
1670-01-162-2381	Tandem link assembly (Multipurpose link)	(4)
5530-00-128-4981	Plywood, 3/4-in	4 sheets
1670-01-097-8816	Release, cargo parachute, M-1	1
1670-01-063-7761	Sling, cargo, airdrop For suspension: 16-ft (2-loop), type XXVI nylon webbing	4
1670-01-062-6304	For lifting: 9-ft (2-loop), type XXVI nylon webbing	2
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	2
1670-01-062-6304	For deployment: 9-ft (2-loop), type XXVI nylon webbing	1
1670-01-062-6313	For riser extension: 60-ft (3-loop), type XXVI nylon webbing	3
4910-01-313-8839	Spreader bar assembly	1
5340-00-040-8219	Strap, parachute release, multi-cut, comes w/ 3 knives	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-foot	20
1670-01-344-0825	Vehicle drive-off aid	1
8305-00-268-2411	Webbing: Cotton, 1/4-in, type I	As required
8305-00-082-5752	Nylon, tubular, 1/2-in	As required
8305-00-263-3591	Type VIII	As required

Section II - RIGGING M1114 UP-ARMORED ARMAMENT CARRIER

DESCRIPTION OF LOAD

4-15. The M1114 HMMWV-series truck has a heavy-duty suspension and additional armor in the sides, door, and floor. The truck is shown in Figure 4-15. The truck is rigged on a 16-foot, type V airdrop platform for low-velocity airdrop. The load requires three G-11 cargo parachutes.

PREPARING PLATFORM

4-16. Prepare a 16-foot, type V airdrop platform according to TM 10-1670-268-20&P/TO 13C7-52-22. Install four tandem links and 18 load tie-down clevises according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-16.

NOTES:

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

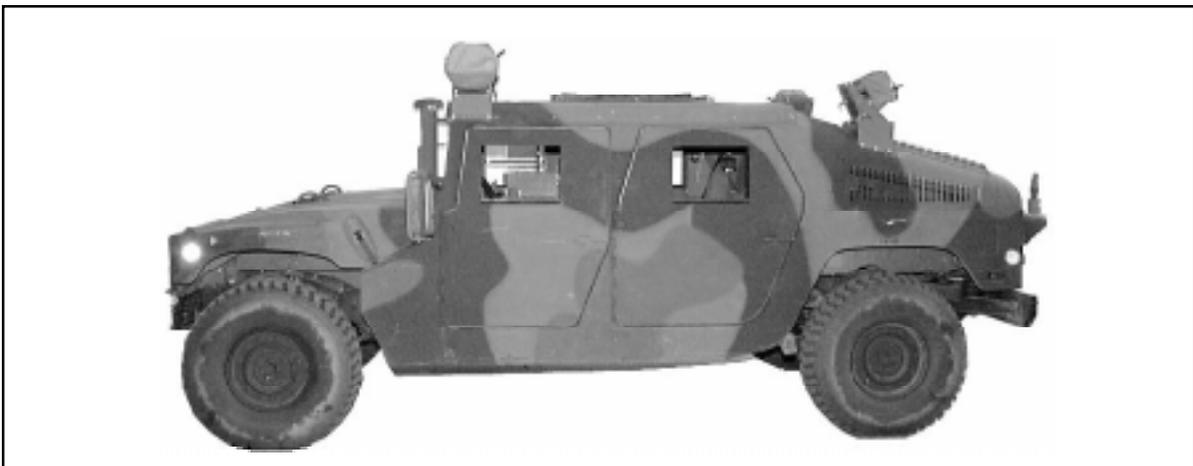
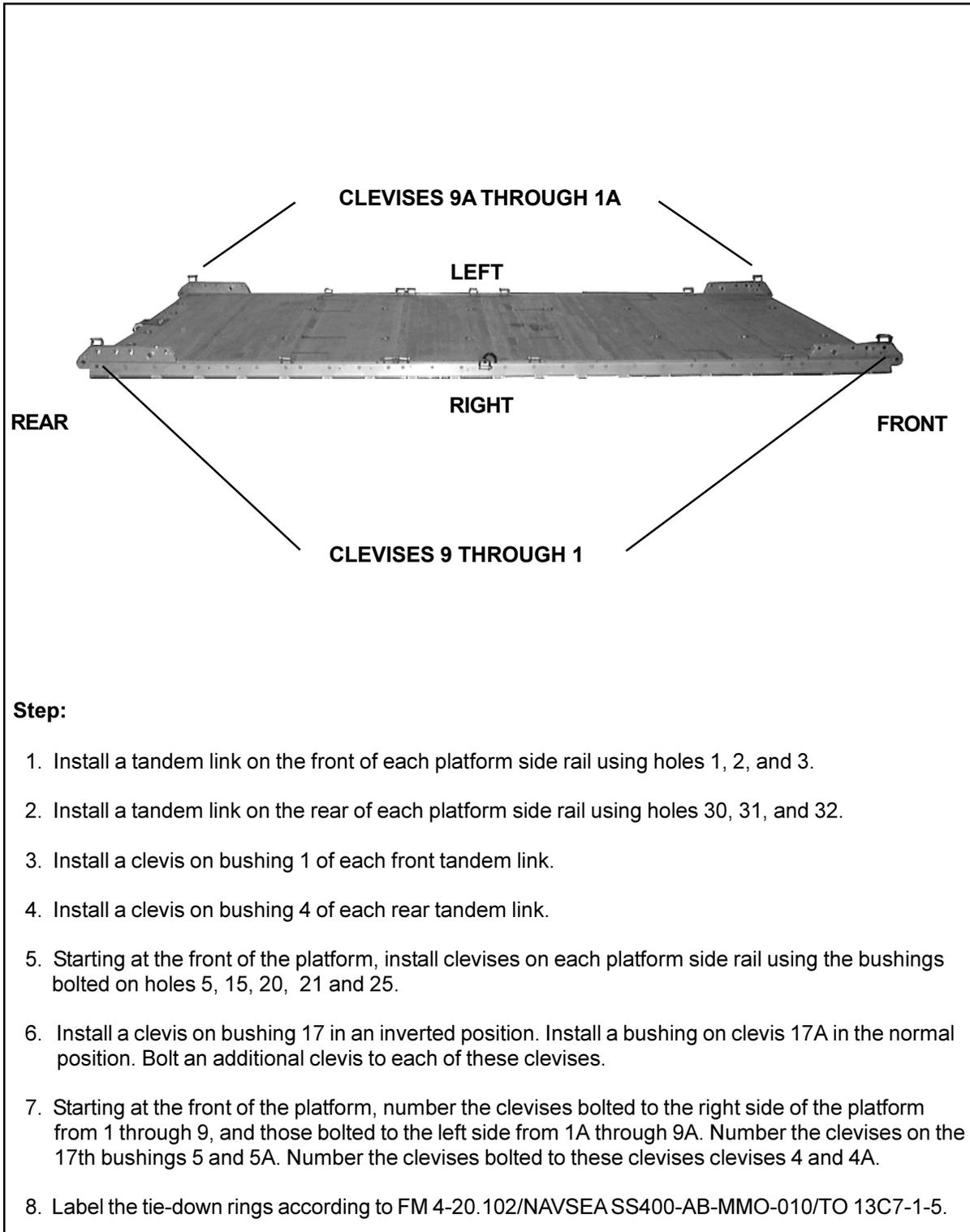


Figure 4-15. M1114 Up-Armored Armament Carrier



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 1 of each front tandem link.
4. Install a clevis on bushing 4 of each rear tandem link.
5. Starting at the front of the platform, install clevises on each platform side rail using the bushings bolted on holes 5, 15, 20, 21 and 25.
6. Install a clevis on bushing 17 in an inverted position. Install a bushing on clevis 17A in the normal position. Bolt an additional clevis to each of these clevises.
7. Starting at the front of the platform, number the clevises bolted to the right side of the platform from 1 through 9, and those bolted to the left side from 1A through 9A. Number the clevises on the 17th bushings 5 and 5A. Number the clevises bolted to these clevises clevises 4 and 4A.
8. Label the tie-down rings according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

Figure 4-16. Platform Prepared

PREPARING AND POSITIONING HONEYCOMB STACKS

4-17. Build the honeycomb stacks as shown in Figures 4-17 through 4-19. Position the stacks on the platform as shown in Figure 4-20.

Notes:
 1. These drawings are not drawn to scale.
 2. All dimensions are in inches.

① Center the edge of a 30- by 14-inch piece of honeycomb along the front edge of an 80- by 24-inch piece of honeycomb.

② Place a 25- by 24-inch piece of honeycomb along each long side of a 30- by 38-inch piece of honeycomb. Align the rear edges of this layer.

③ Center a 30- by 14-inch piece of honeycomb along the front edge of a 54- by 24-inch piece of honeycomb.

④ Place a 12- by 24-inch piece of honeycomb along each long side of a 30- by 38-inch piece of honeycomb. Align the rear edges of this layer.

⑤ Make this layer as shown in step 3 above and center it over the fourth layer.

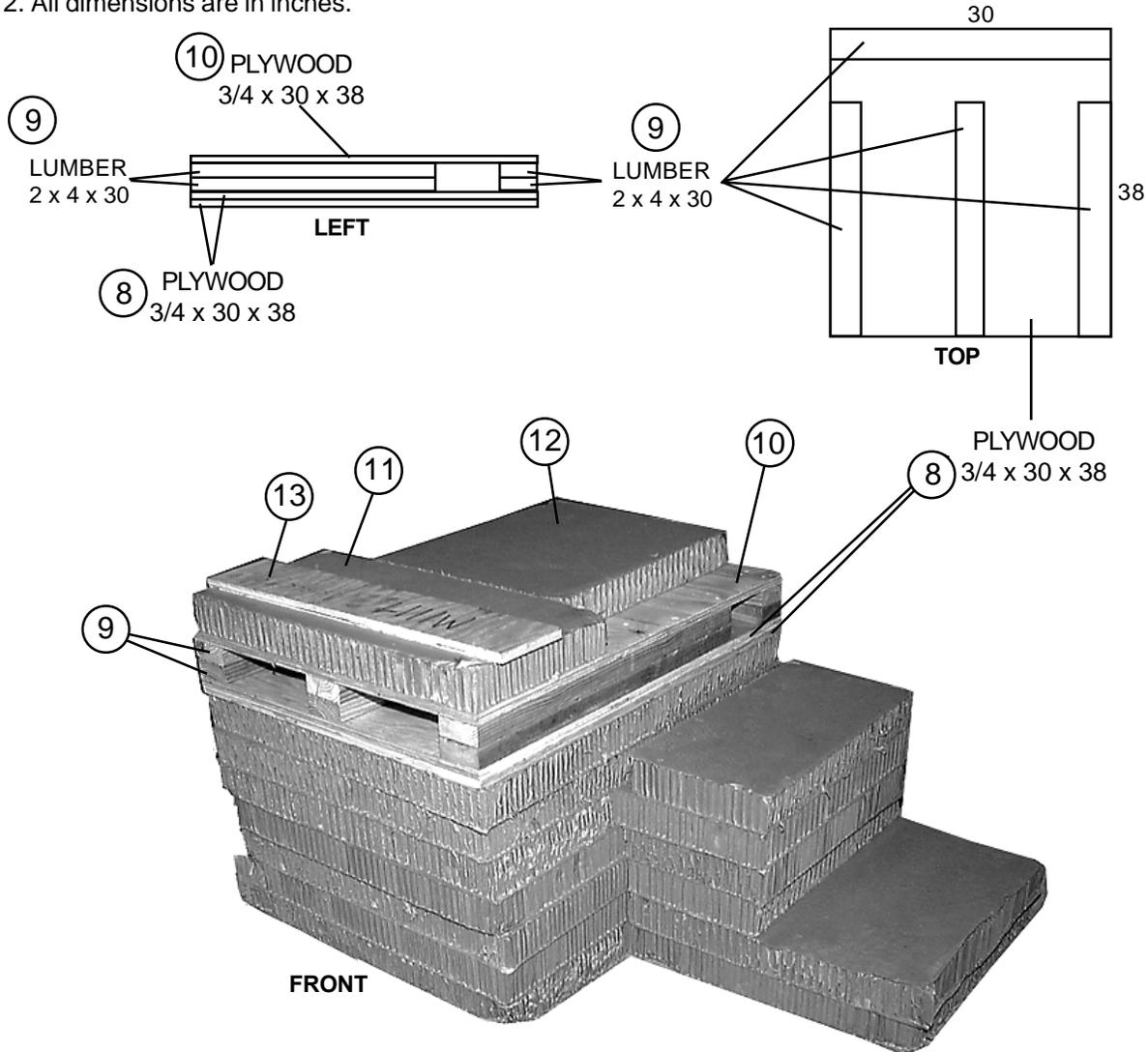
⑥ Make this layer as shown in step 4 above and center it over the fifth layer.

⑦ Center a 30- by 38-inch piece of honeycomb over the sixth layer.

Figure 4-17. Stack 1 Prepared

Notes:

1. These drawings are not drawn to scale.
2. All dimensions are in inches.



- (8) Nail two 30- by 38-inch pieces of 3/4-inch plywood flush together.
- (9) Space and nail eight pieces of 2- by 4-inch lumber in pairs and to the plywood as shown.
- (10) Nail one 30- by 38-inch piece of 3/4-inch plywood flush over the lumber as shown.
- (11) Glue a 30- by 14-inch piece of honeycomb flush along the front edge as shown.
- (12) Center a 20-inch side of a 20- by 24-inch piece of honeycomb along the rear edge of the piece placed in step 11.
- (13) Glue a 30- by 6-inch piece of 3/4-inch plywood 1 inch from the front edge of the stack.

Figure 4-17. Stack 1 Prepared (continued)

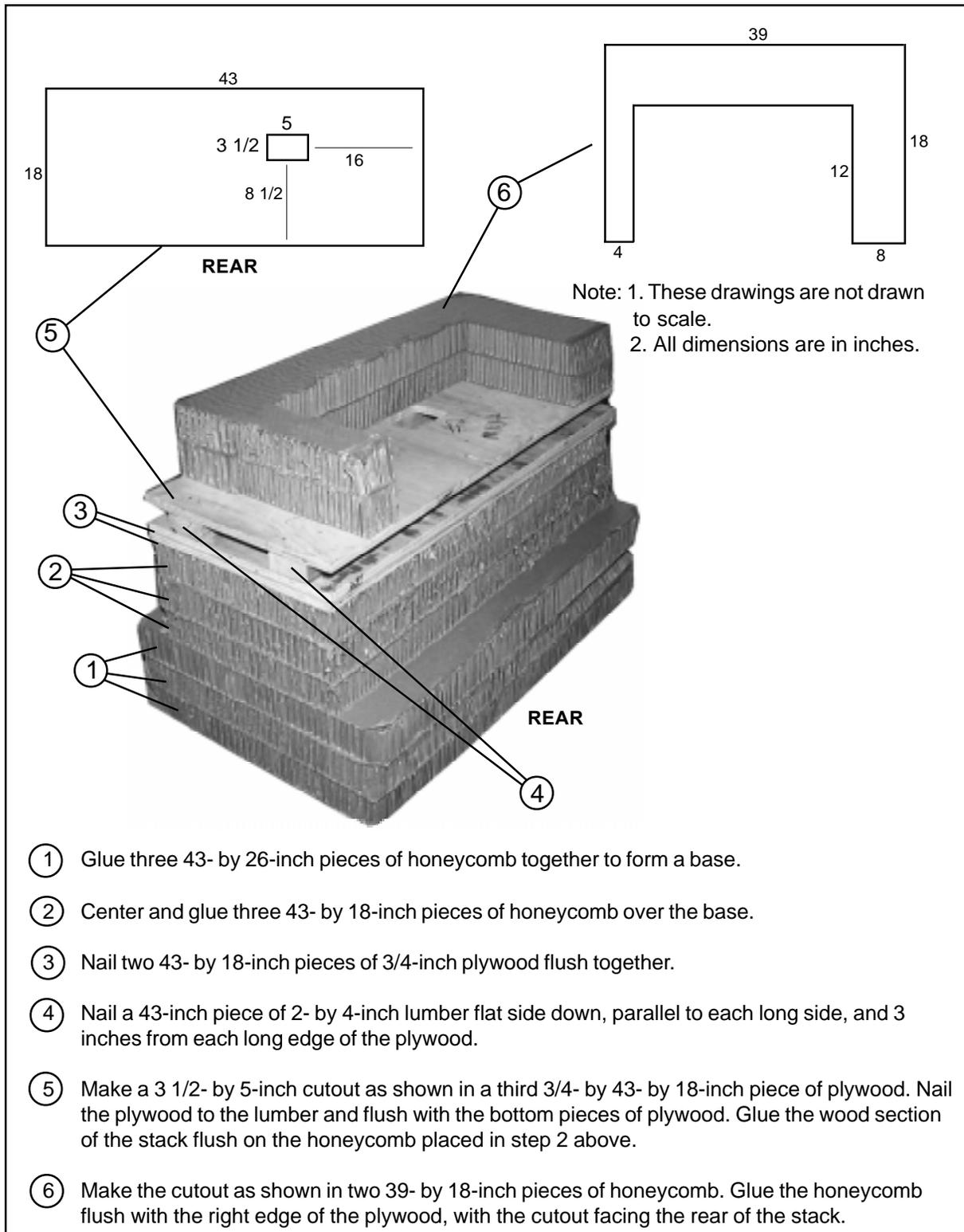


Figure 4-18. Stack 2 Prepared

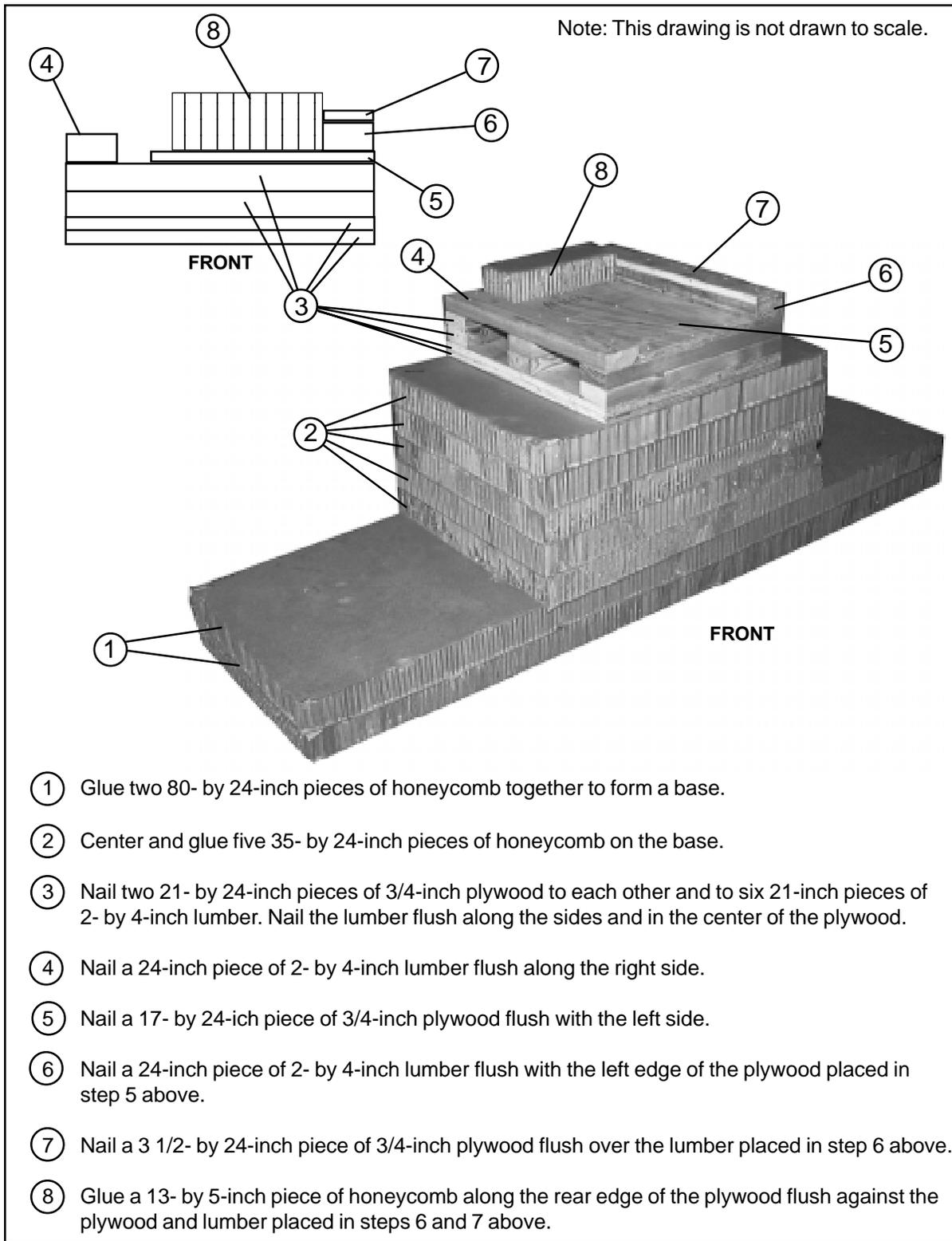
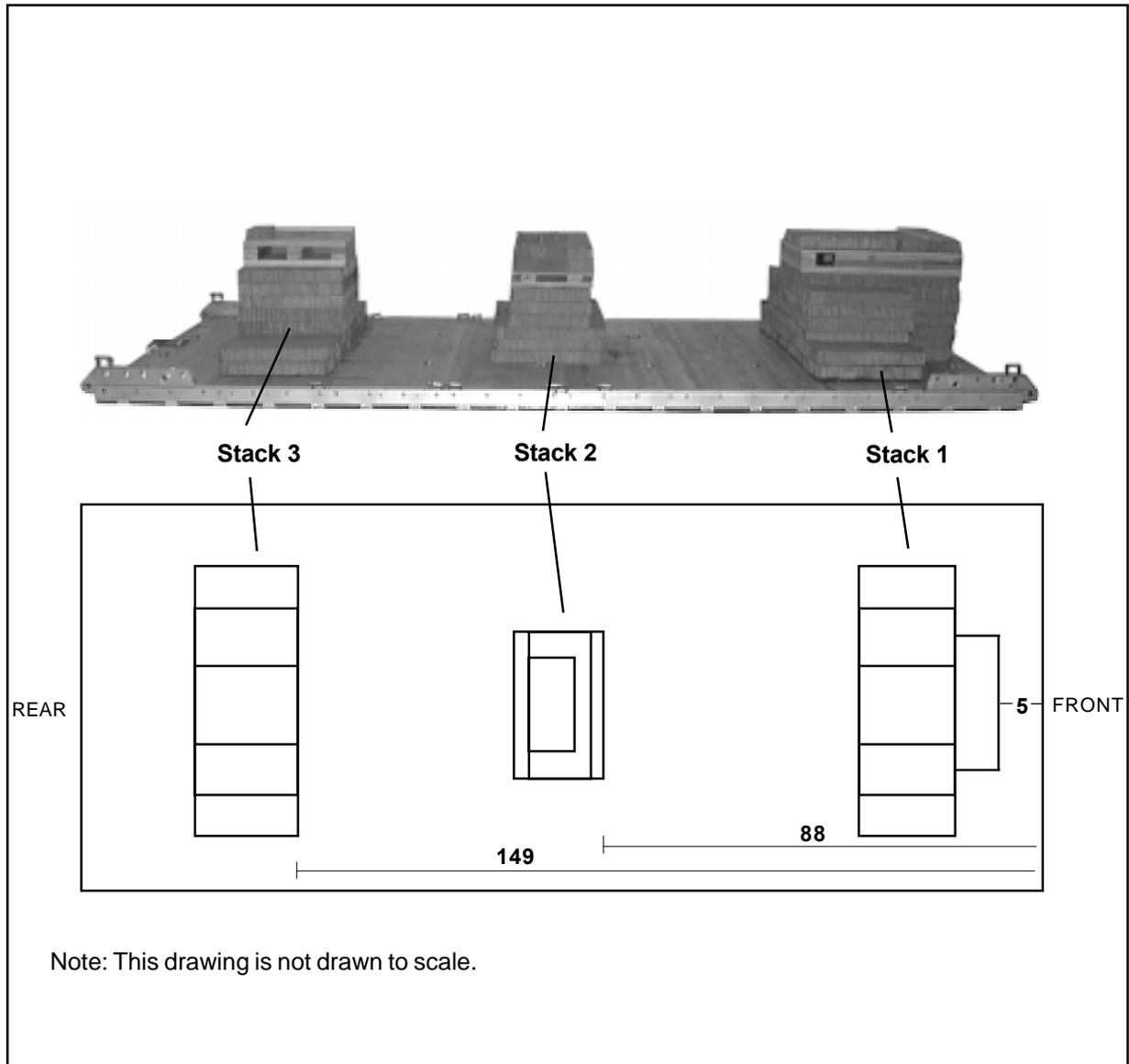


Figure 4-19. Stack 3 Prepared



Stack Number	Position of Stack on Platform
1	Place stack: 5 inches from the front edge of the platform and centered.
2	88 inches from the front edge of the platform and centered. Face the cutout to the rear.
3	149 inches from the front edge of the platform and centered.

Figure 4-20. Honeycomb Stacks Positioned on Platform

PREPARING TRUCK

4-18. Prepare the truck as described below.

- a. Prepare the cab of the truck as shown in Figures 2-8, steps 3 through 10.
- b. Prepare the body of the truck as shown in Figure 4-21.
- c. Prepare the underside of the truck as shown in Figure 4-22.
- d. Prepare the hood and roof of the truck as shown in Figure 4-23.

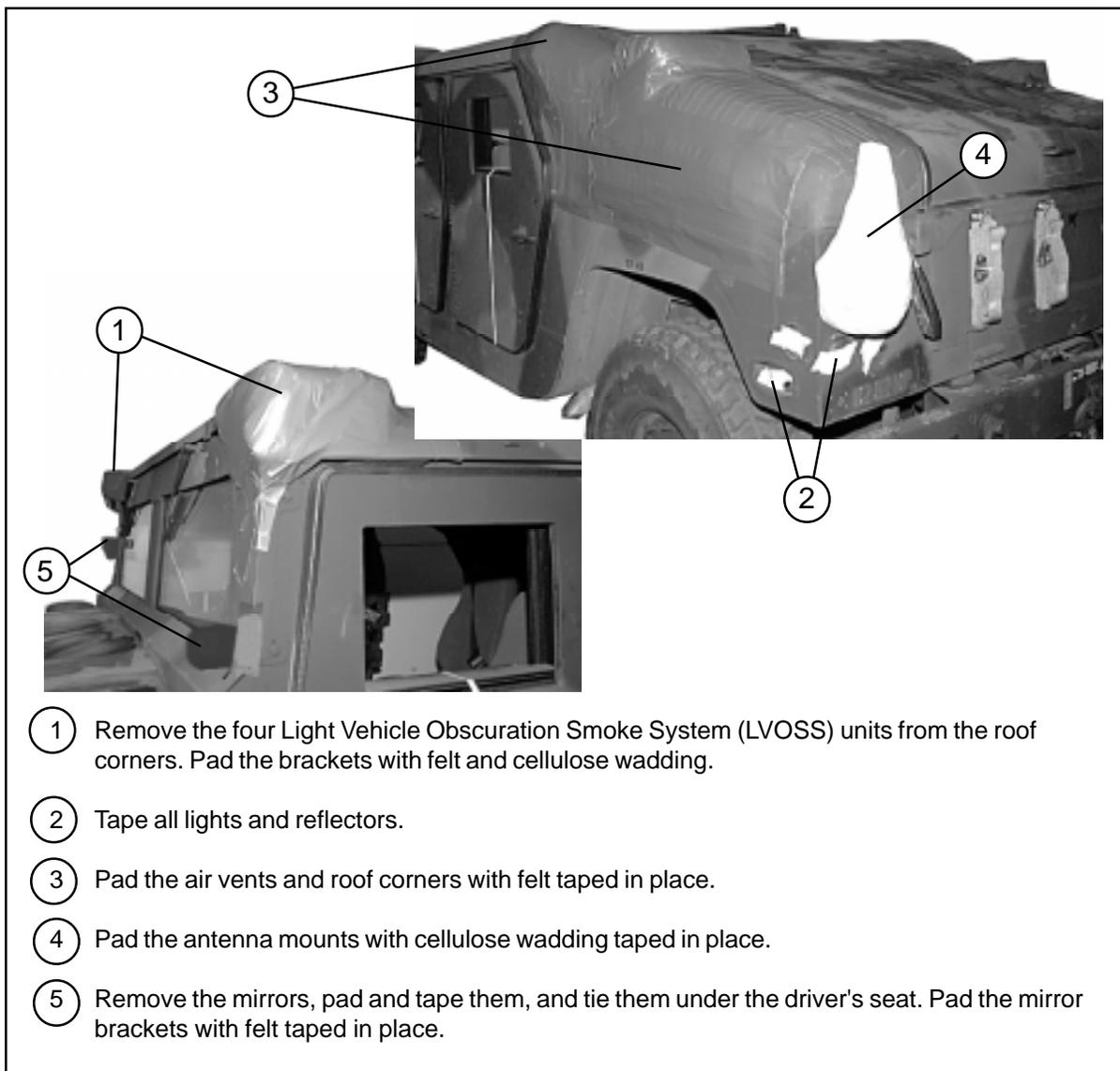


Figure 4-21. Truck Body Prepared

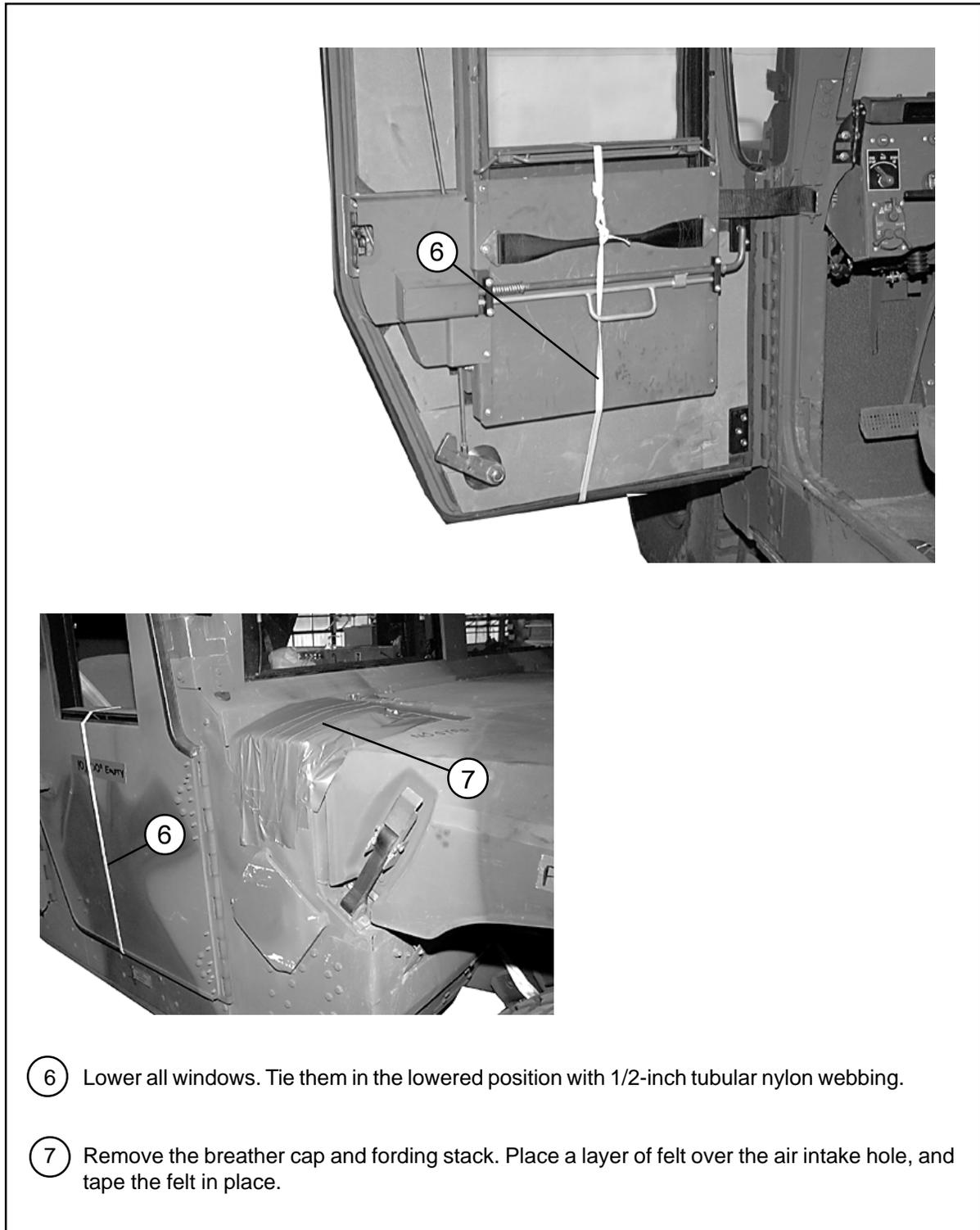


Figure 4-21. Truck Body Prepared (continued)

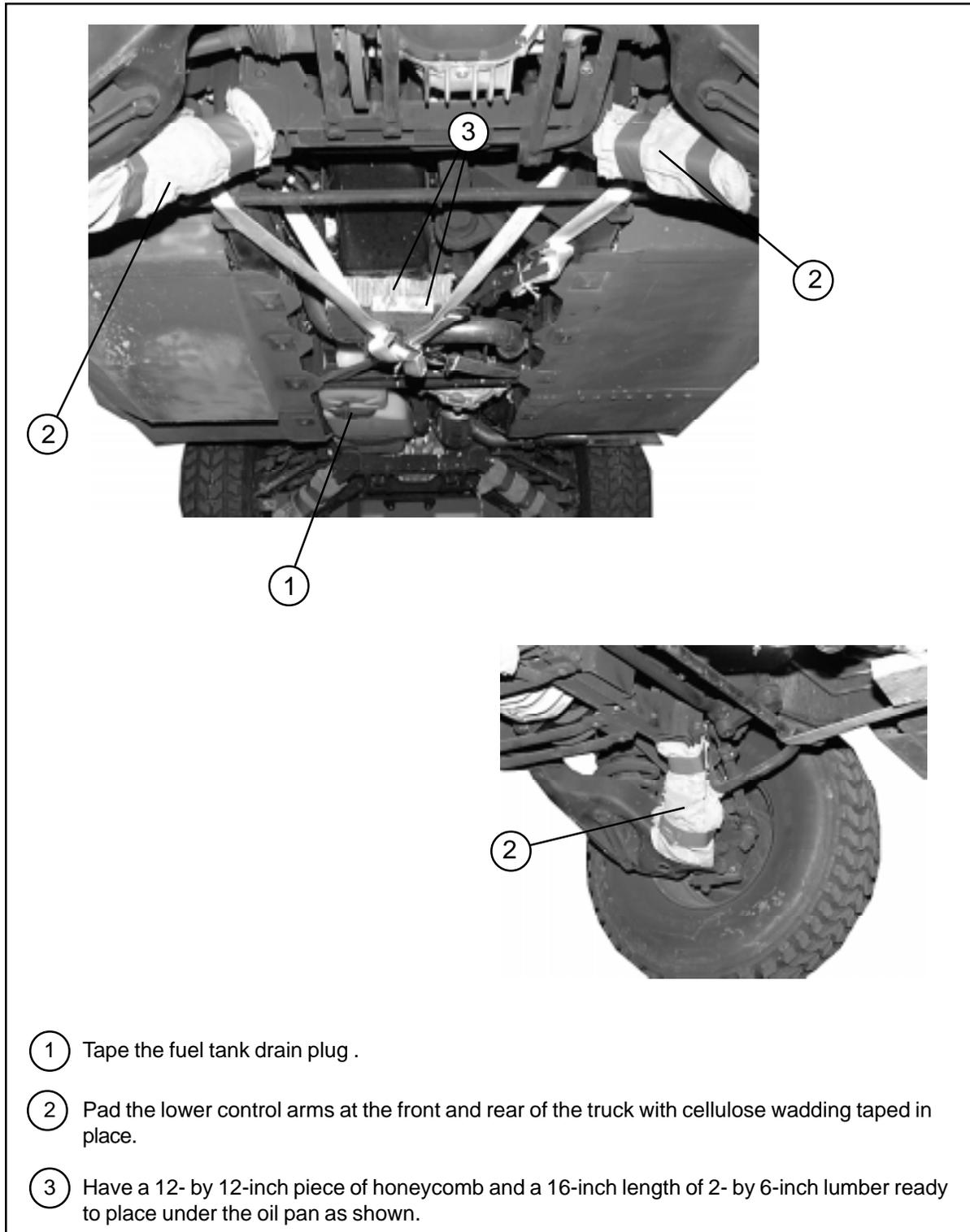
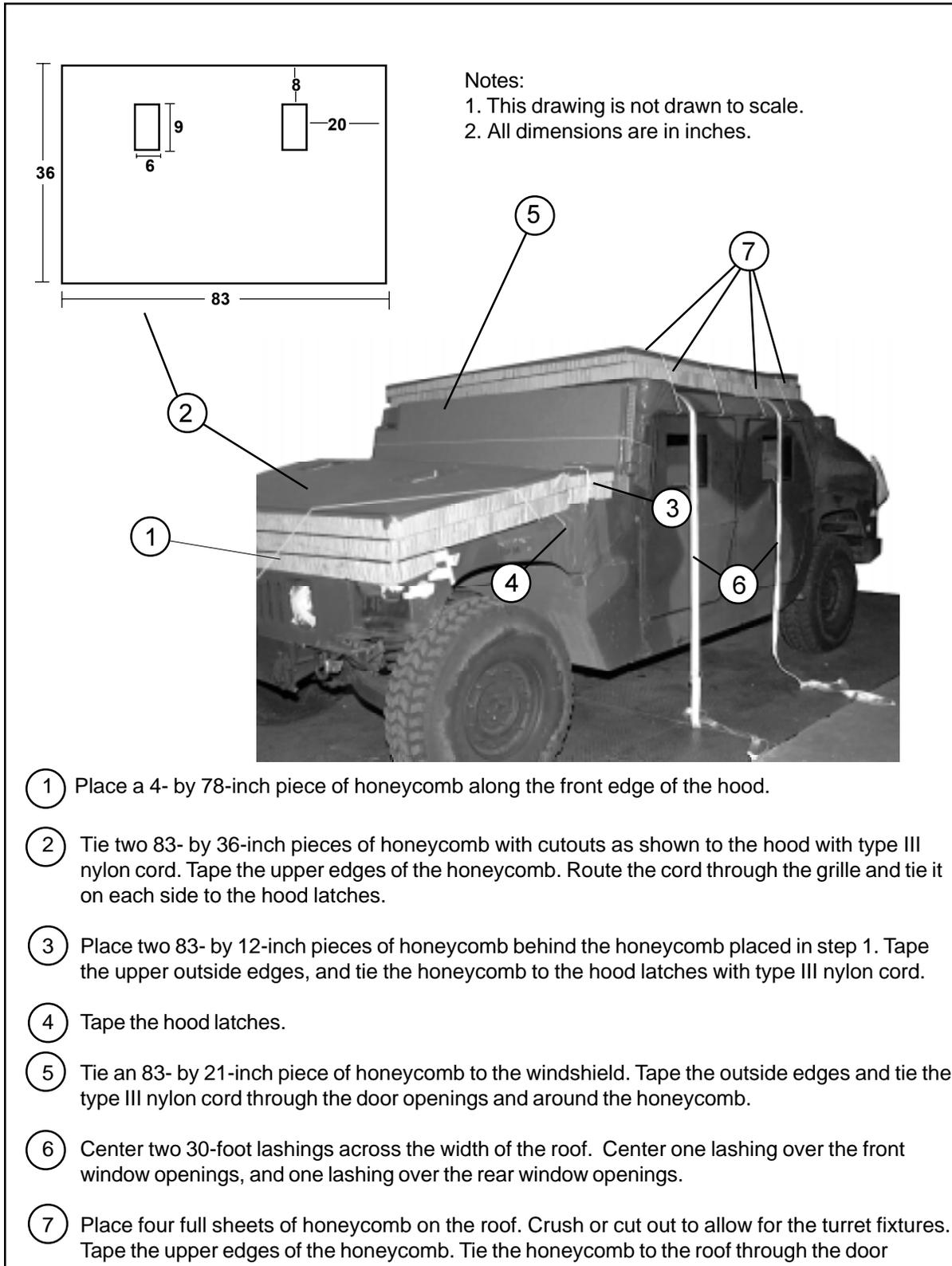


Figure 4-22. Underside of Truck Prepared



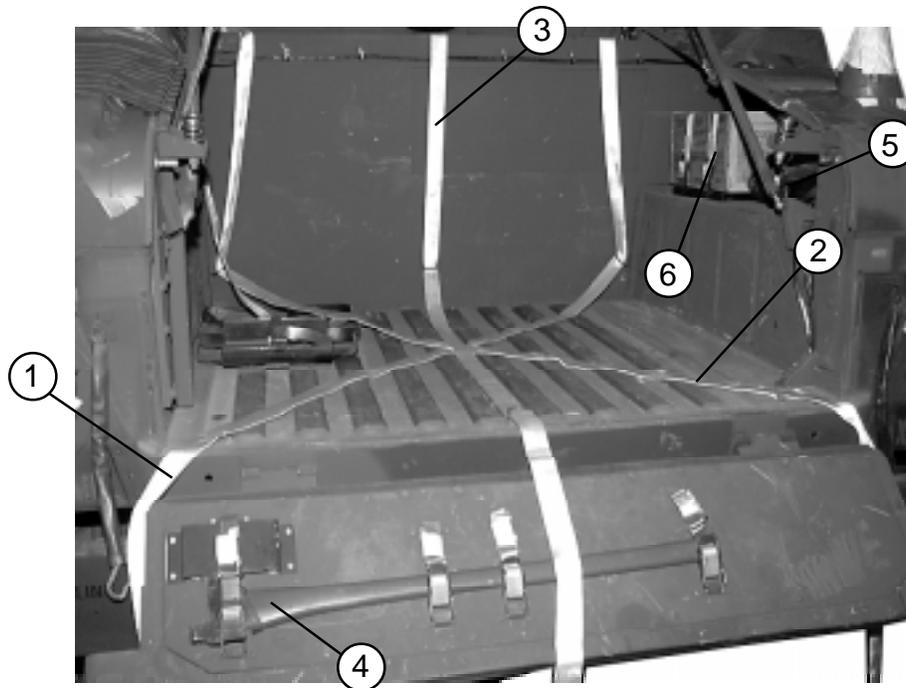
- ① Place a 4- by 78-inch piece of honeycomb along the front edge of the hood.
- ② Tie two 83- by 36-inch pieces of honeycomb with cutouts as shown to the hood with type III nylon cord. Tape the upper edges of the honeycomb. Route the cord through the grille and tie it on each side to the hood latches.
- ③ Place two 83- by 12-inch pieces of honeycomb behind the honeycomb placed in step 1. Tape the upper outside edges, and tie the honeycomb to the hood latches with type III nylon cord.
- ④ Tape the hood latches.
- ⑤ Tie an 83- by 21-inch piece of honeycomb to the windshield. Tape the outside edges and tie the type III nylon cord through the door openings and around the honeycomb.
- ⑥ Center two 30-foot lashings across the width of the roof. Center one lashing over the front window openings, and one lashing over the rear window openings.
- ⑦ Place four full sheets of honeycomb on the roof. Crush or cut out to allow for the turret fixtures. Tape the upper edges of the honeycomb. Tie the honeycomb to the roof through the door

Figure 4-23. Hood and Roof Covered

Stowing Load in M1114 Truck

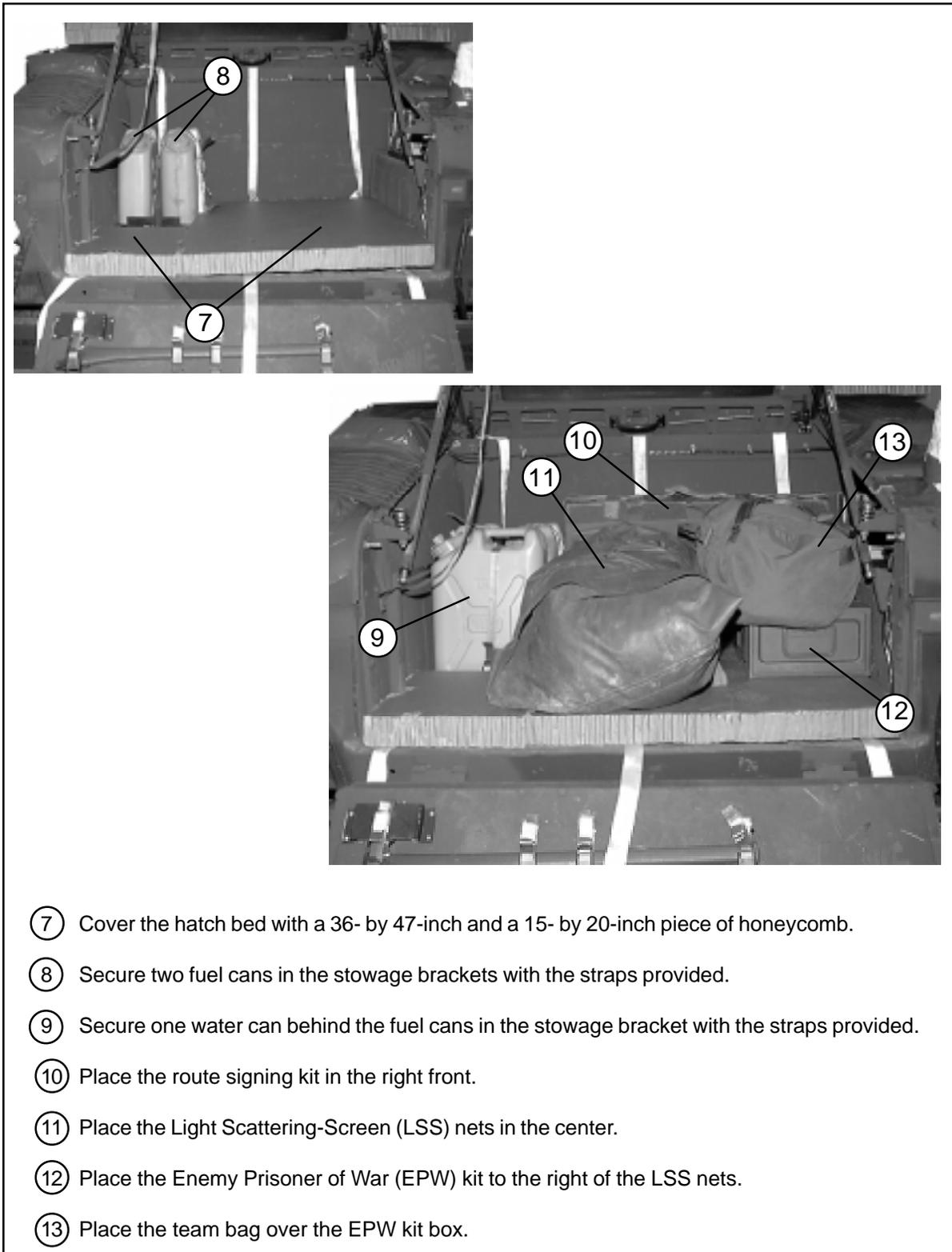
4-19. Stow mission equipment in the truck cargo compartment as shown in Figure 4-24. Stow items in the cab area as shown in Figure 4-25. Install the wood side protection boards as shown in Figure 4-26.

CAUTION
 Only ammunition listed in FM 10-500-53/MCRP4-3.81/TO 137-18-41 may be airdropped. Package, label, and mark hazardous material according to AFJMAN 24-204 TM 38-250.



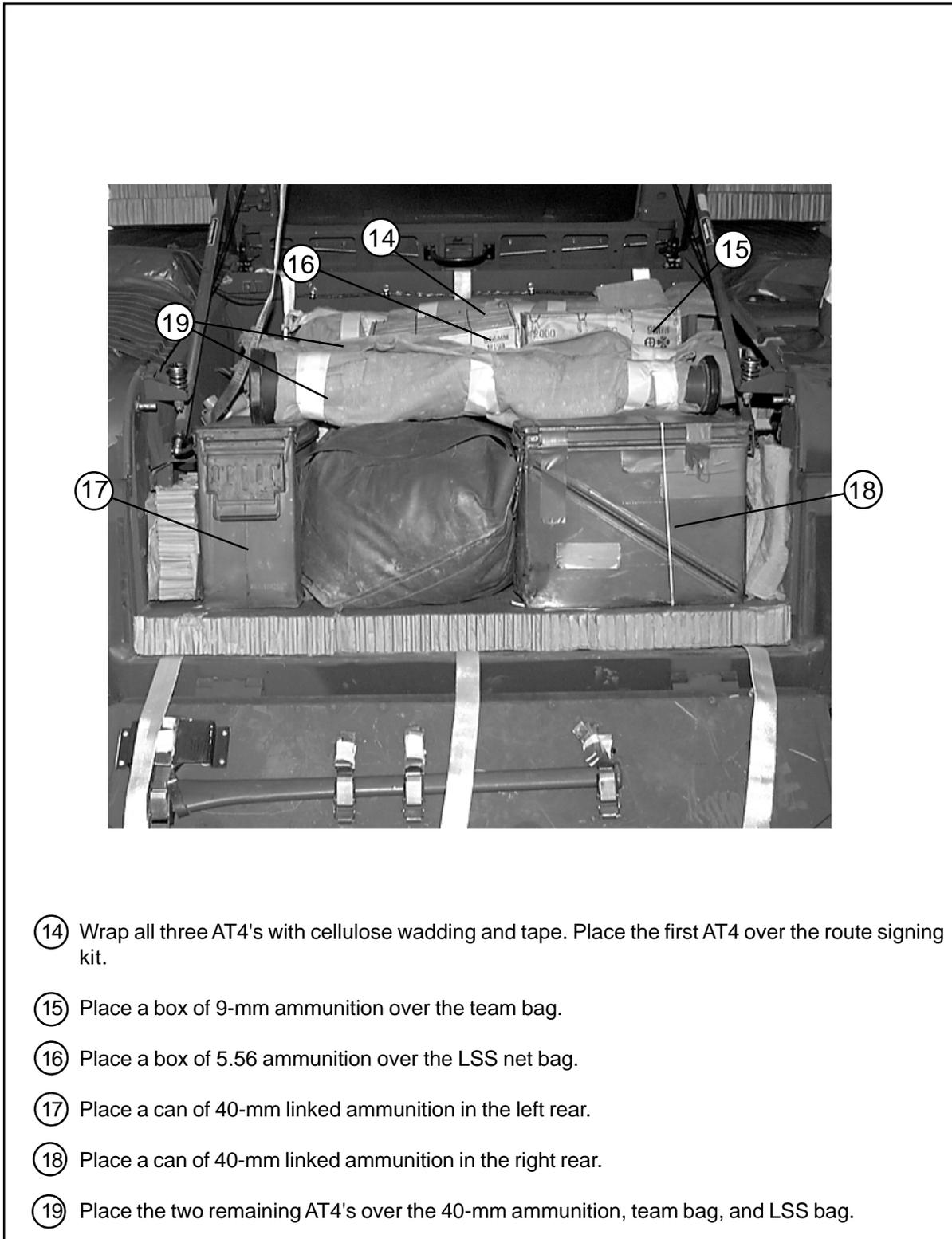
- ① Route a lashing through the left rear and right front cargo bed rings.
- ② Route a lashing through the right rear and left front cargo bed rings.
- ③ Route a lashing through the front center and rear center cargo bed rings.
- ④ Secure the axe in its mount on the tailgate with the straps provided.
- ⑤ Secure the jack and MAX tool kit in the right storage area over the wheel well with the straps provided.
- ⑥ Place one box of 9-mm ammunition in the right wheel well cargo area and secure it with the straps provided.

Figure 4-24. Accompanying Load Stowed in Cargo Bed



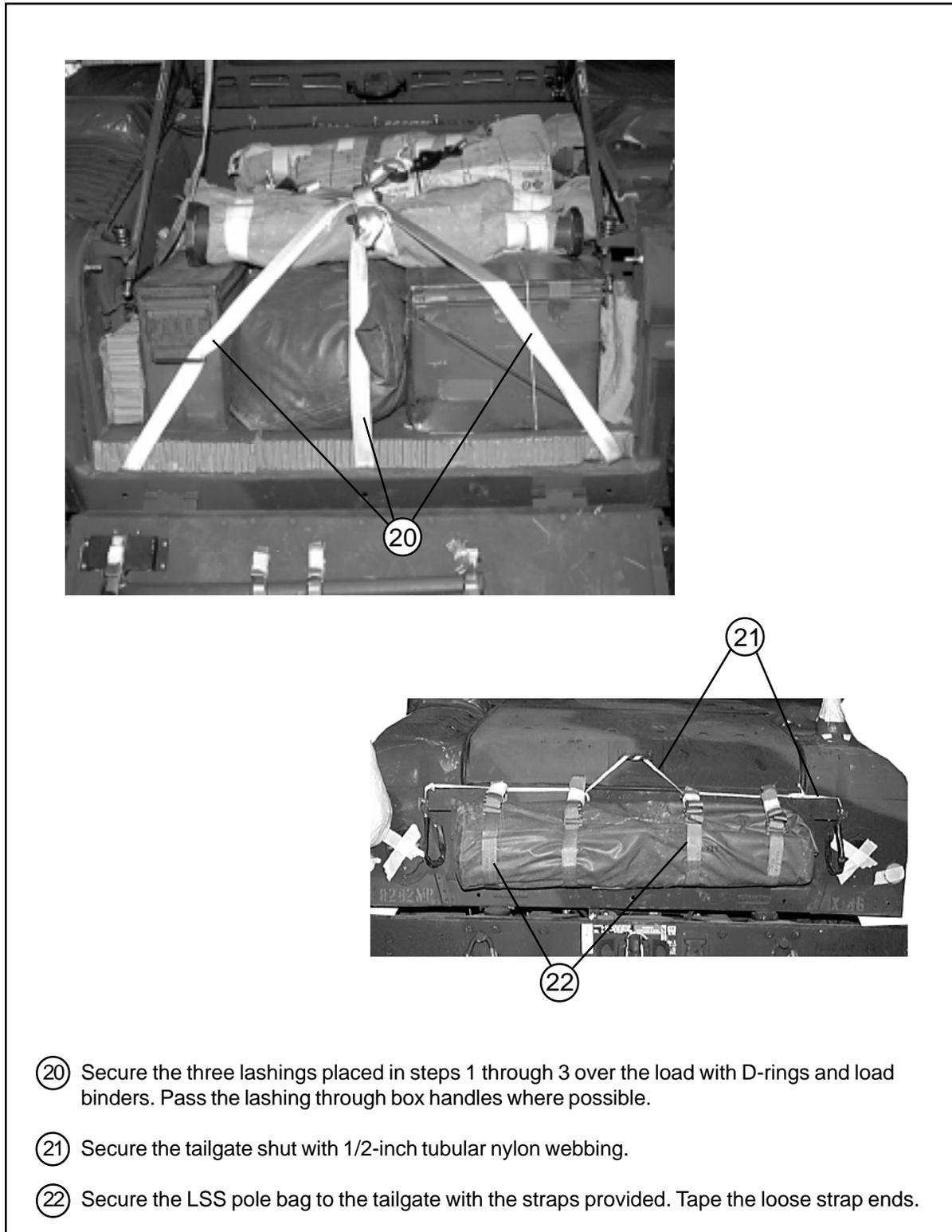
- ⑦ Cover the hatch bed with a 36- by 47-inch and a 15- by 20-inch piece of honeycomb.
- ⑧ Secure two fuel cans in the stowage brackets with the straps provided.
- ⑨ Secure one water can behind the fuel cans in the stowage bracket with the straps provided.
- ⑩ Place the route signing kit in the right front.
- ⑪ Place the Light Scattering-Screen (LSS) nets in the center.
- ⑫ Place the Enemy Prisoner of War (EPW) kit to the right of the LSS nets.
- ⑬ Place the team bag over the EPW kit box.

Figure 4-24. Accompanying Load Stowed in Cargo Bed (continued)



- ⑭ Wrap all three AT4's with cellulose wadding and tape. Place the first AT4 over the route signing kit.
- ⑮ Place a box of 9-mm ammunition over the team bag.
- ⑯ Place a box of 5.56 ammunition over the LSS net bag.
- ⑰ Place a can of 40-mm linked ammunition in the left rear.
- ⑱ Place a can of 40-mm linked ammunition in the right rear.
- ⑲ Place the two remaining AT4's over the 40-mm ammunition, team bag, and LSS bag.

Figure 4-24. Accompanying Load Stowed in Cargo Bed (continued)



- ⑳ Secure the three lashings placed in steps 1 through 3 over the load with D-rings and load binders. Pass the lashing through box handles where possible.
- ㉑ Secure the tailgate shut with 1/2-inch tubular nylon webbing.
- ㉒ Secure the LSS pole bag to the tailgate with the straps provided. Tape the loose strap ends.

Figure 4-24. Accompanying Load Stowed in Cargo Bed (continued)

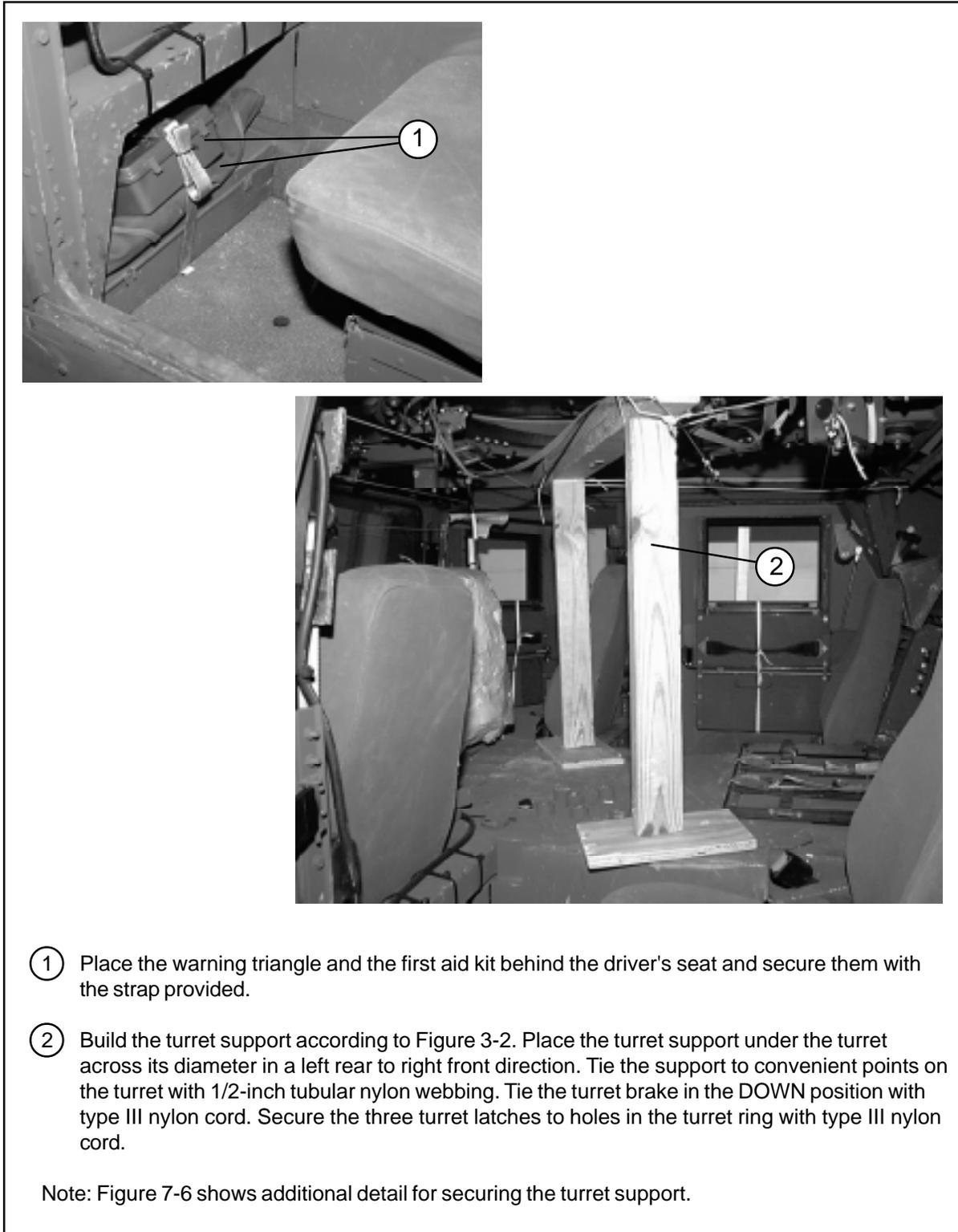
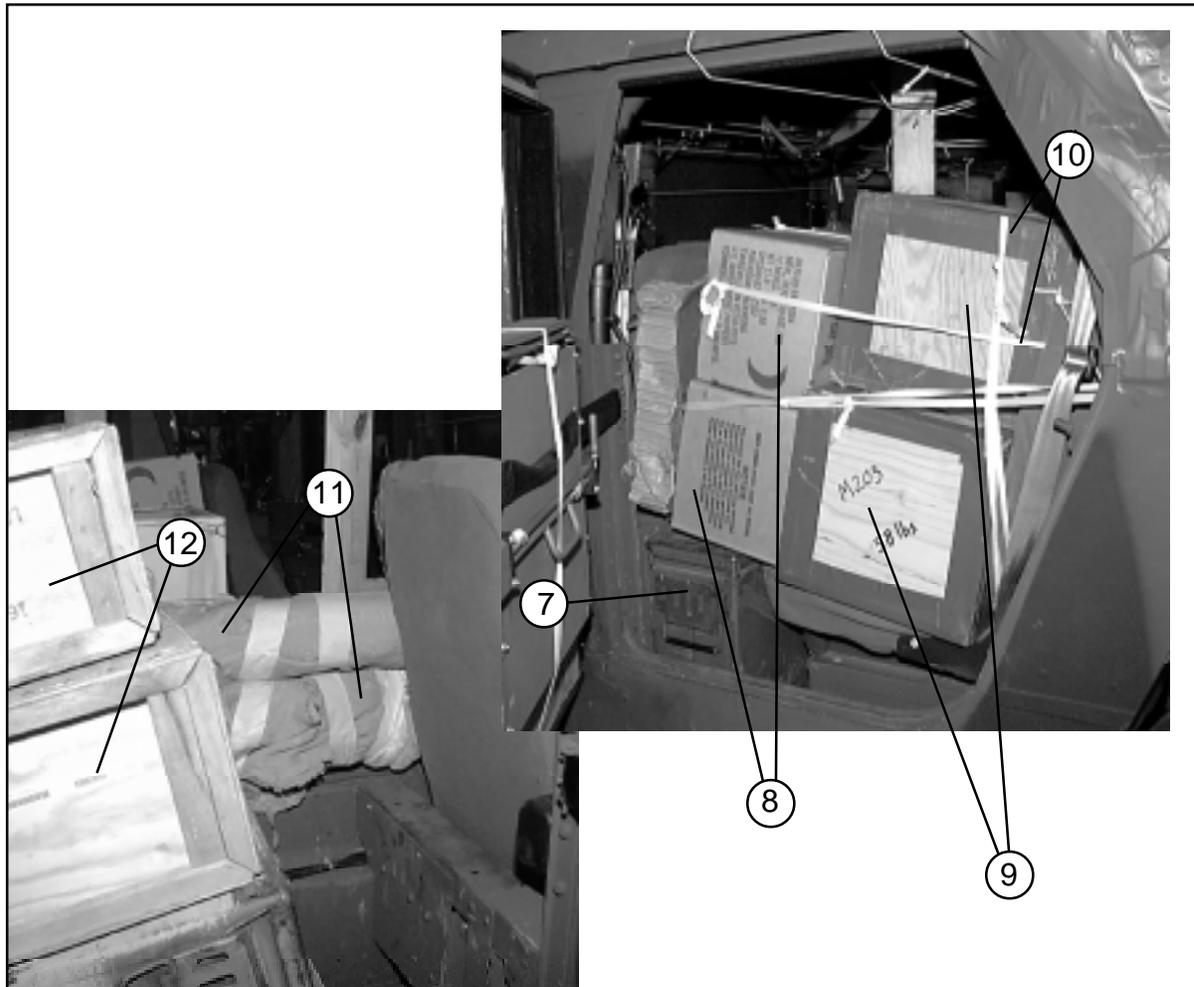


Figure 4-25. Accompanying Load Stowed in Cab

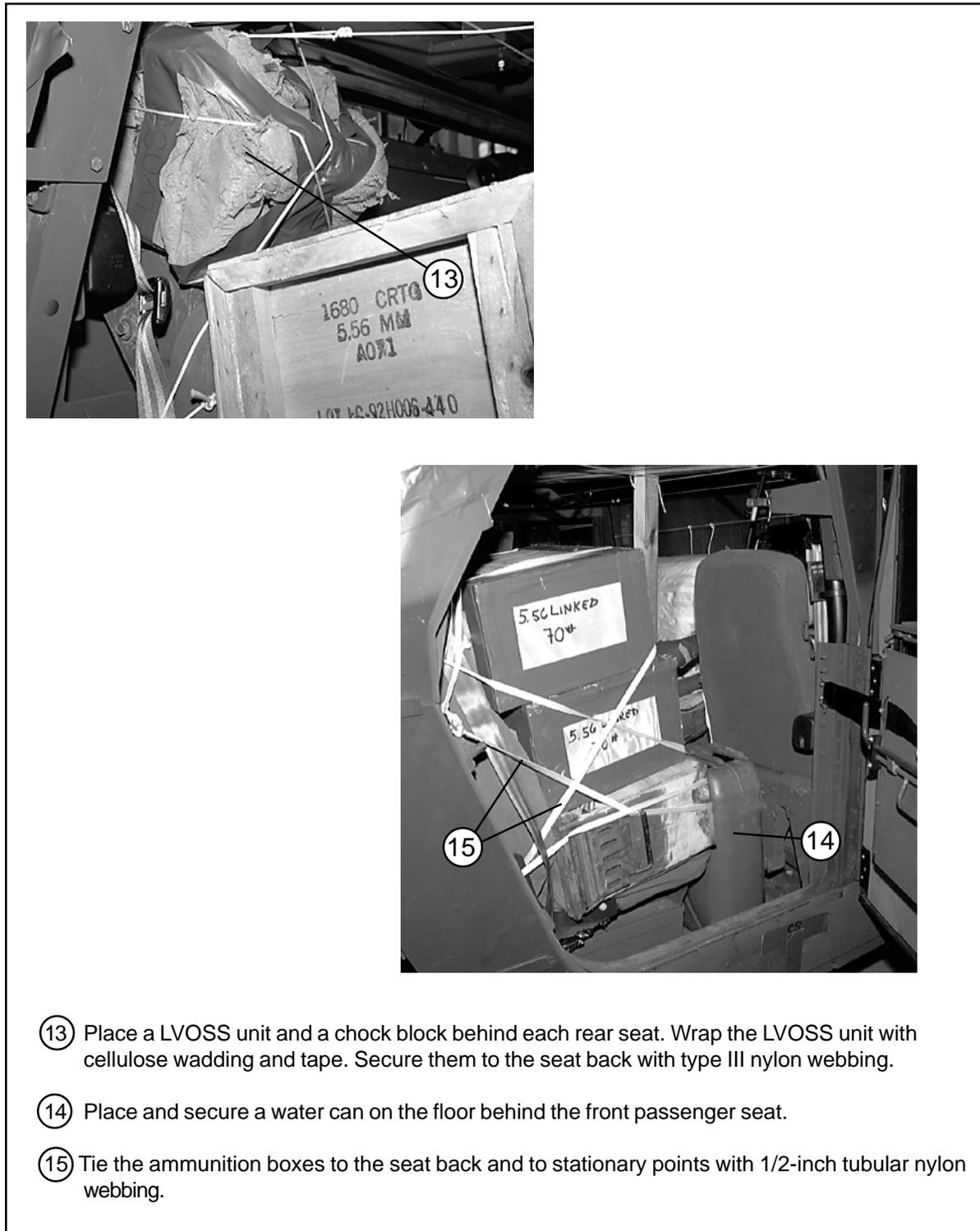


Figure 4-25. Accompanying Load Stowed in Cab (continued)



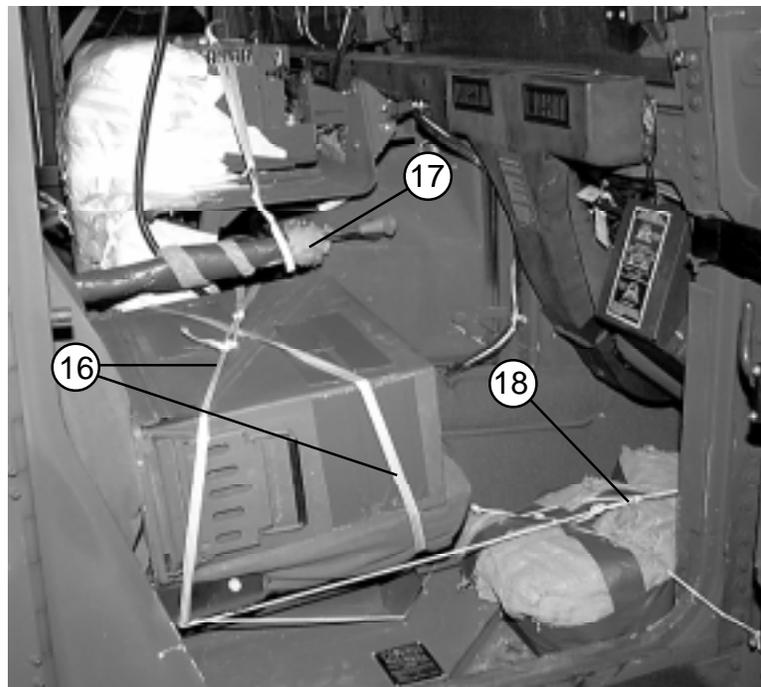
- ⑦ Place a box of 40-mm linked ammunition upright on the floor behind the driver's seat.
- ⑧ Set two boxes of MRE's on their sides over the 40-mm ammunition box.
- ⑨ Place a box of claymore mines and a box of M203 grenade rounds between the left rear seat back and the boxes placed in steps 7 and 8.
- ⑩ Tie the items placed in steps 7 through 9 to the seat back and to stationary points in the truck with 1/2-inch tubular nylon webbing. Place a piece of honeycomb between the driver's seat back and the tied items.
- ⑪ Wrap the Mark 19 grenade launcher, tripod, and fording stack with cellulose wadding and tape. Place them in the cab center between the passenger seats. Secure them to points near the floor with type III nylon cord.
- ⑫ Place two 5.56-mm ammunition boxes over the 40-mm ammunition box placed in step 5.

Figure 4-25. Accompanying Load Stowed in Cab (continued)



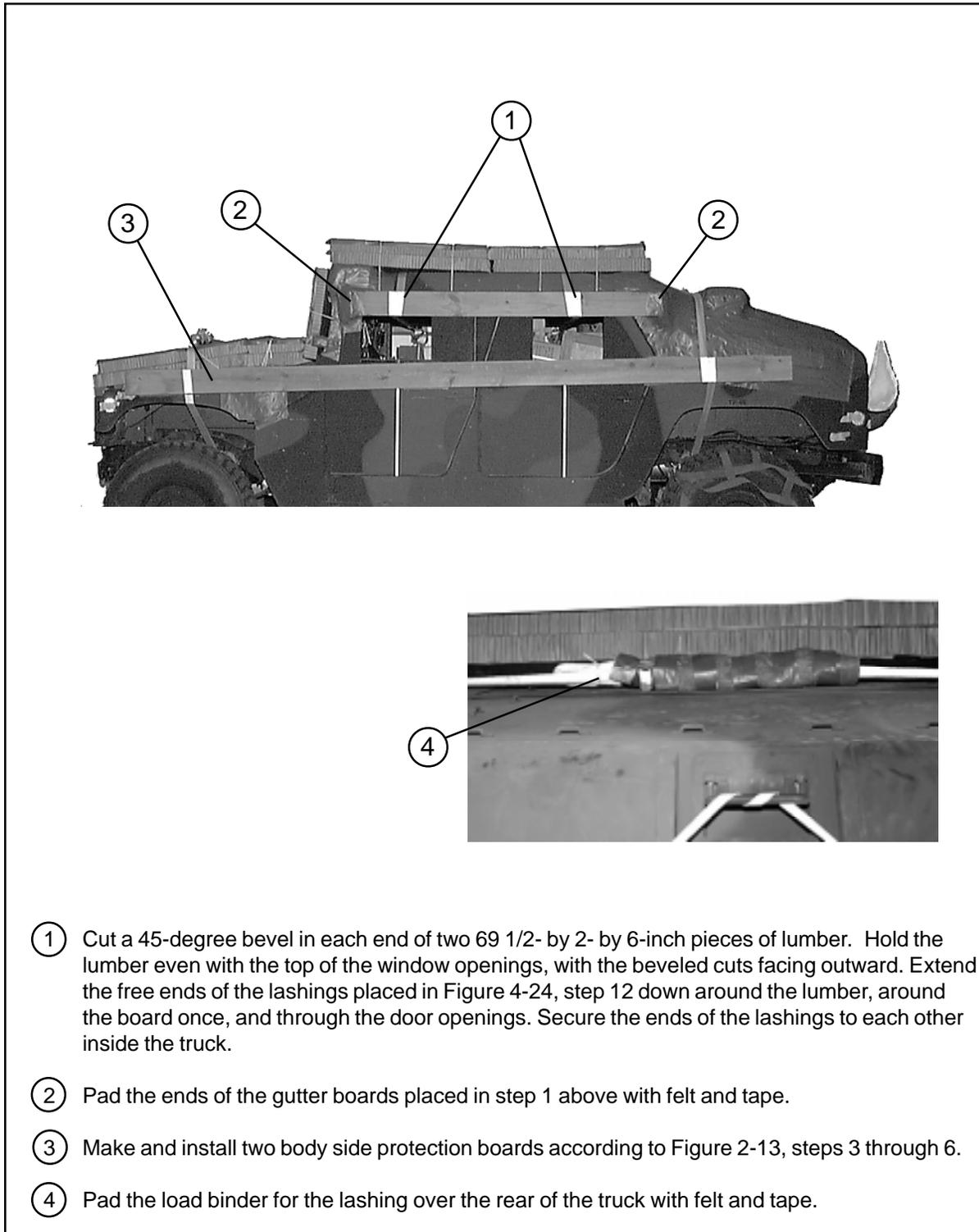
- ⑬ Place a LVOSS unit and a chock block behind each rear seat. Wrap the LVOSS unit with cellulose wadding and tape. Secure them to the seat back with type III nylon webbing.
- ⑭ Place and secure a water can on the floor behind the front passenger seat.
- ⑮ Tie the ammunition boxes to the seat back and to stationary points with 1/2-inch tubular nylon webbing.

Figure 4-25. Accompanying Load Stowed in Cab (continued)



- ①⑥ Tie a box of 40-mm linked ammunition to the front passenger seat with 1/2-inch tubular nylon webbing.
- ①⑦ Wrap the antenna sections with cellulose wadding and tape. Tie the antenna sections to convenient points with 1/2-inch tubular nylon webbing.
- ①⑧ Pad the remaining LVOSS units with cellulose wadding and tape. Tie them in the front passenger footwell with 1/2-inch tubular nylon webbing.

Figure 4-25. Accompanying Load Stowed in Cab (continued)



- ① Cut a 45-degree bevel in each end of two 69 1/2- by 2- by 6-inch pieces of lumber. Hold the lumber even with the top of the window openings, with the beveled cuts facing outward. Extend the free ends of the lashings placed in Figure 4-24, step 12 down around the lumber, around the board once, and through the door openings. Secure the ends of the lashings to each other inside the truck.
- ② Pad the ends of the gutter boards placed in step 1 above with felt and tape.
- ③ Make and install two body side protection boards according to Figure 2-13, steps 3 through 6.
- ④ Pad the load binder for the lashing over the rear of the truck with felt and tape.

Figure 4-26. Body Side Protection Boards Installed

LIFTING AND POSITIONING TRUCK, AND INSTALLING OPTIONAL DRIVE-OFF AIDS

4-20. Install the optional drive-off aids on the platform as shown in Figure 4-27. Install lifting slings on the truck as shown in Figure 2-16. Position the truck on the honeycomb stacks as shown in Figure 4-28. Install the drive-off aids, if used, to the rear wheels of the truck as shown in Figure 2-17.

LASHING TRUCK

4-21. Lash the truck to the platform with fifteen 15-foot tie-down assemblies as shown in Figures 4-29 and 4-30, and according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

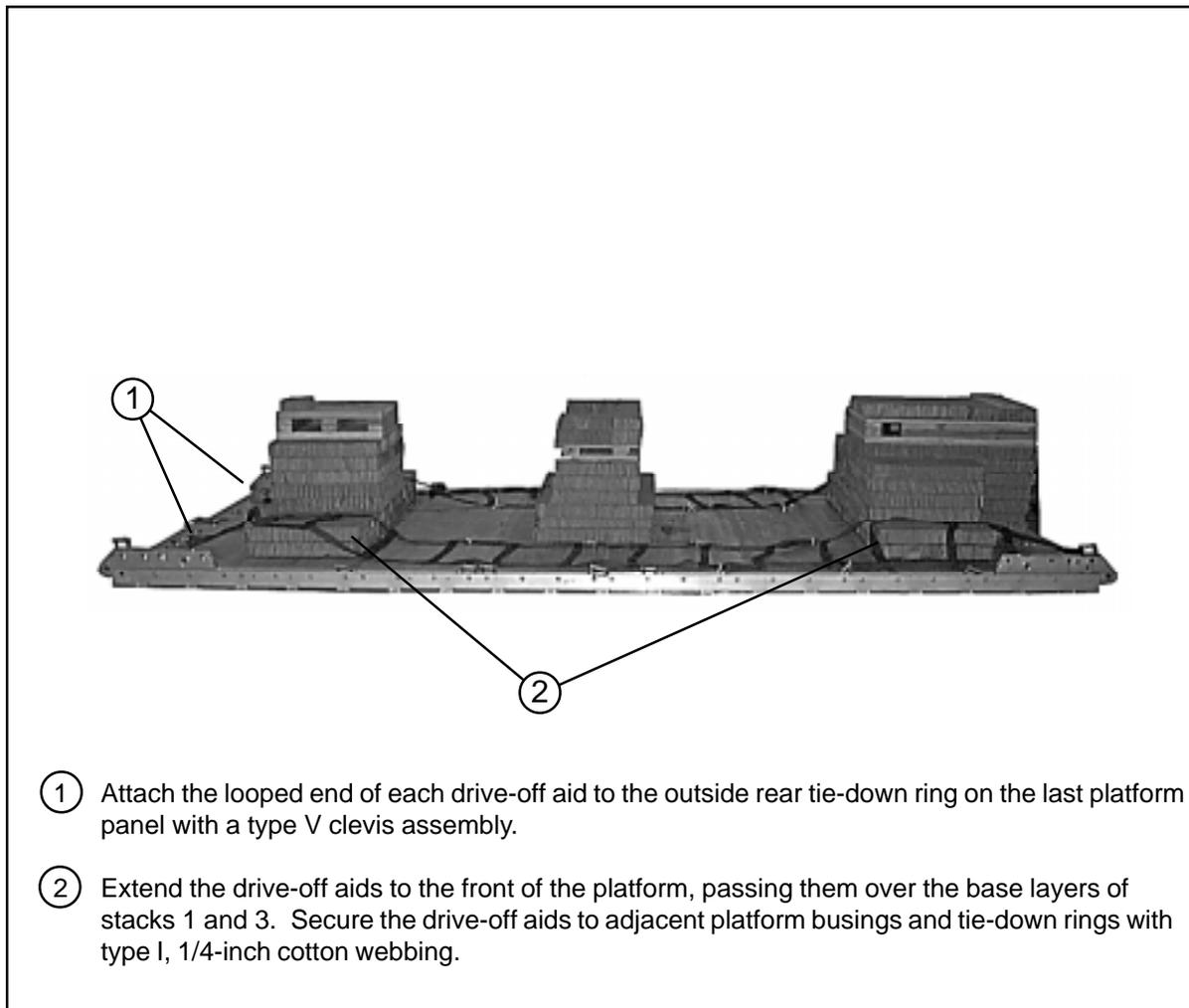


Figure 4-27. Drive-off Aids Installed on Platform

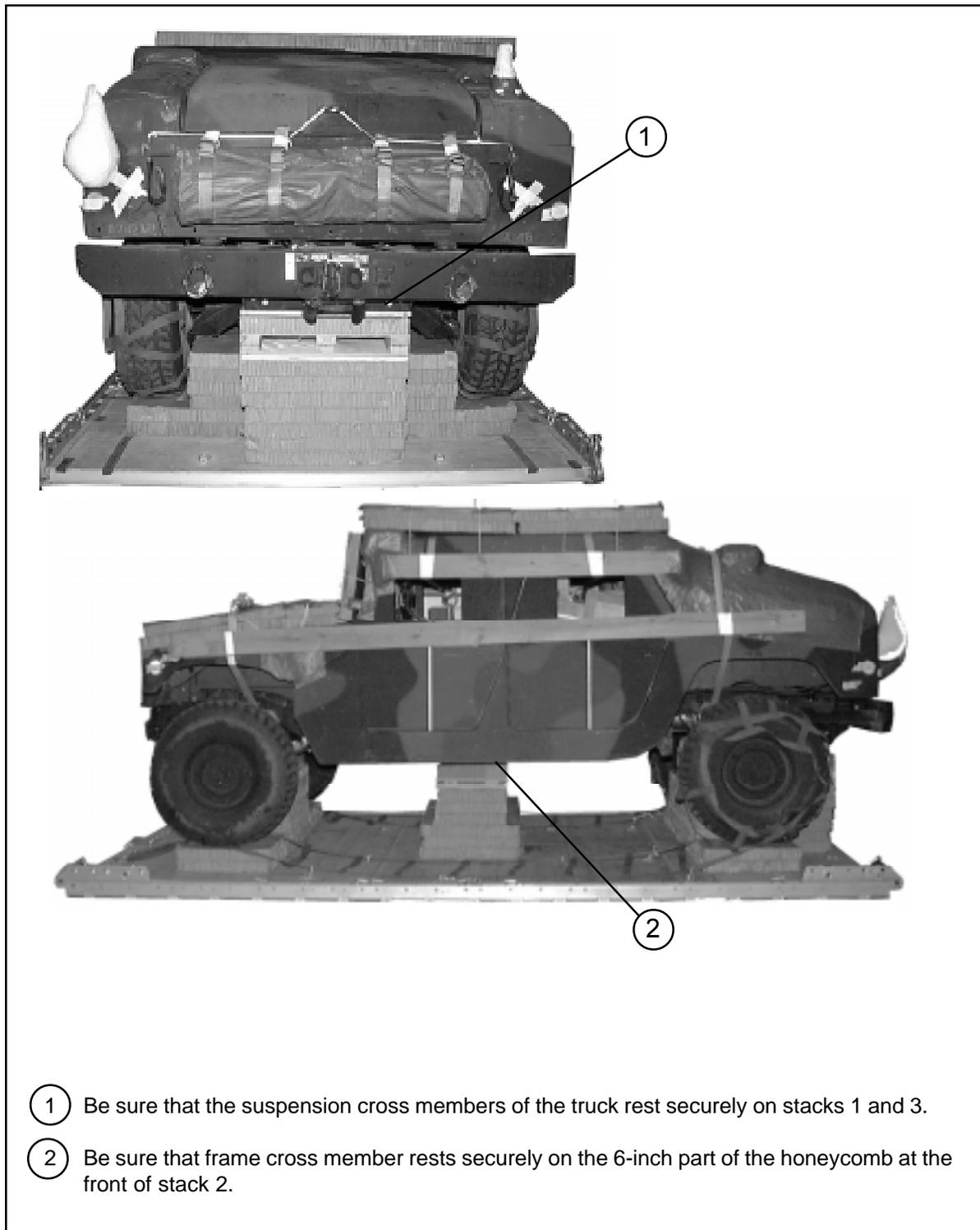
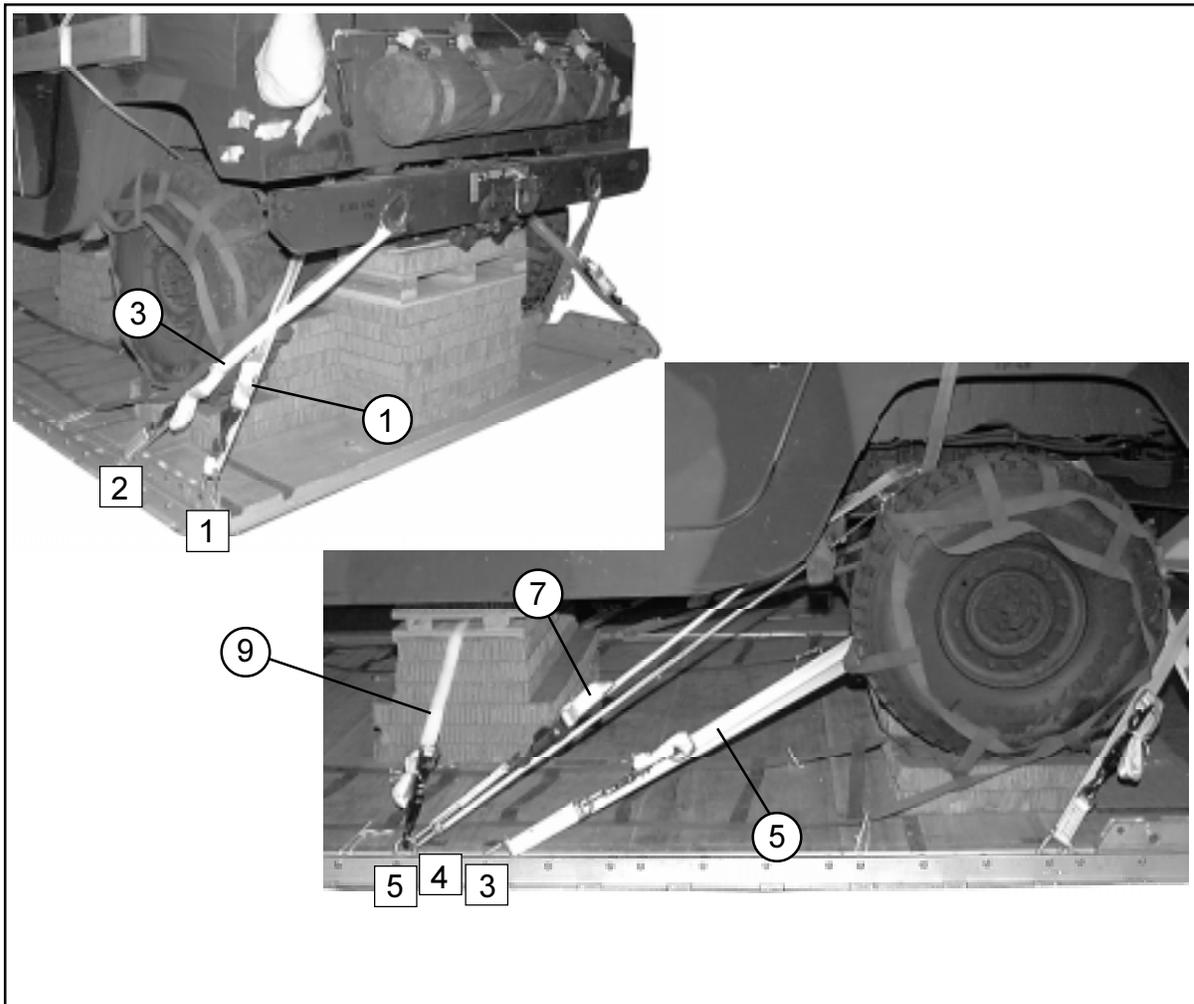
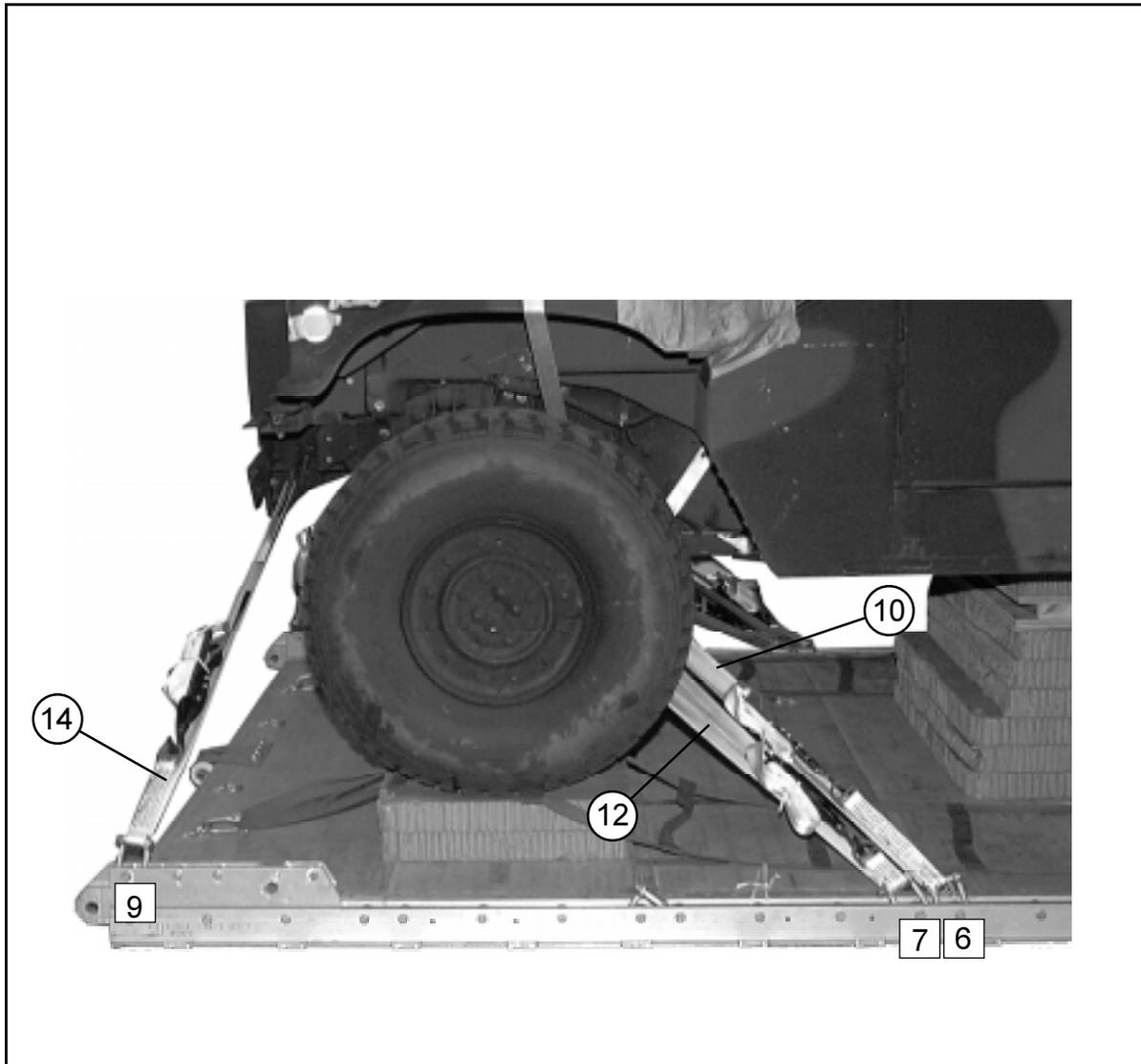


Figure 4-28. Truck Positioned on Platform and Drive-Off Aids Installed



Lashing Number	Tie-down Clevis Number	Instructions
1	1	Pass lashing:
2	1A	Through tie-down bracket behind left rear coil spring.
3	2	Through tie-down bracket behind right rear coil spring.
4	2A	Through left rear lifting shackle.
5	3	Through right rear lifting shackle.
6	3A	Around left rear lower control arm.
7	4	Around right rear lower control arm.
8	4A	Through tie-down bracket in front of left rear coil spring.
9	5 and 5A	Through tie-down bracket in front of right rear coil spring.
		Pass a 15-foot lashing through clevis 5A and through its own D-ring. Pass the lashing through the hole in stack 2. Attach the lashing to clevis 5 with a load binder.

Figure 4-29. Lashings 1 Through 9 Installed



Lashing Number	Tie-down Clevis Number	Instructions
10	6	Pass lashing:
11	6A	Through tie-down bracket behind left front coil spring.
12	7	Through tie-down bracket behind right front coil spring.
13	7	Around left lower control arm.
14	7A	Around right lower control arm.
15	9	Through tie-down bracket on end of left frame rail.
	9A	Through tie-down bracket on end of right frame rail.

Figure 4-30. Lashings 10 Through 15 Installed

INSTALLING AND SAFETY TYING SUSPENSION SLINGS

4-22. Install, pad and safety tie four 16-foot (4-loop), type XXVI nylon suspension slings as shown in Figure 4-31.

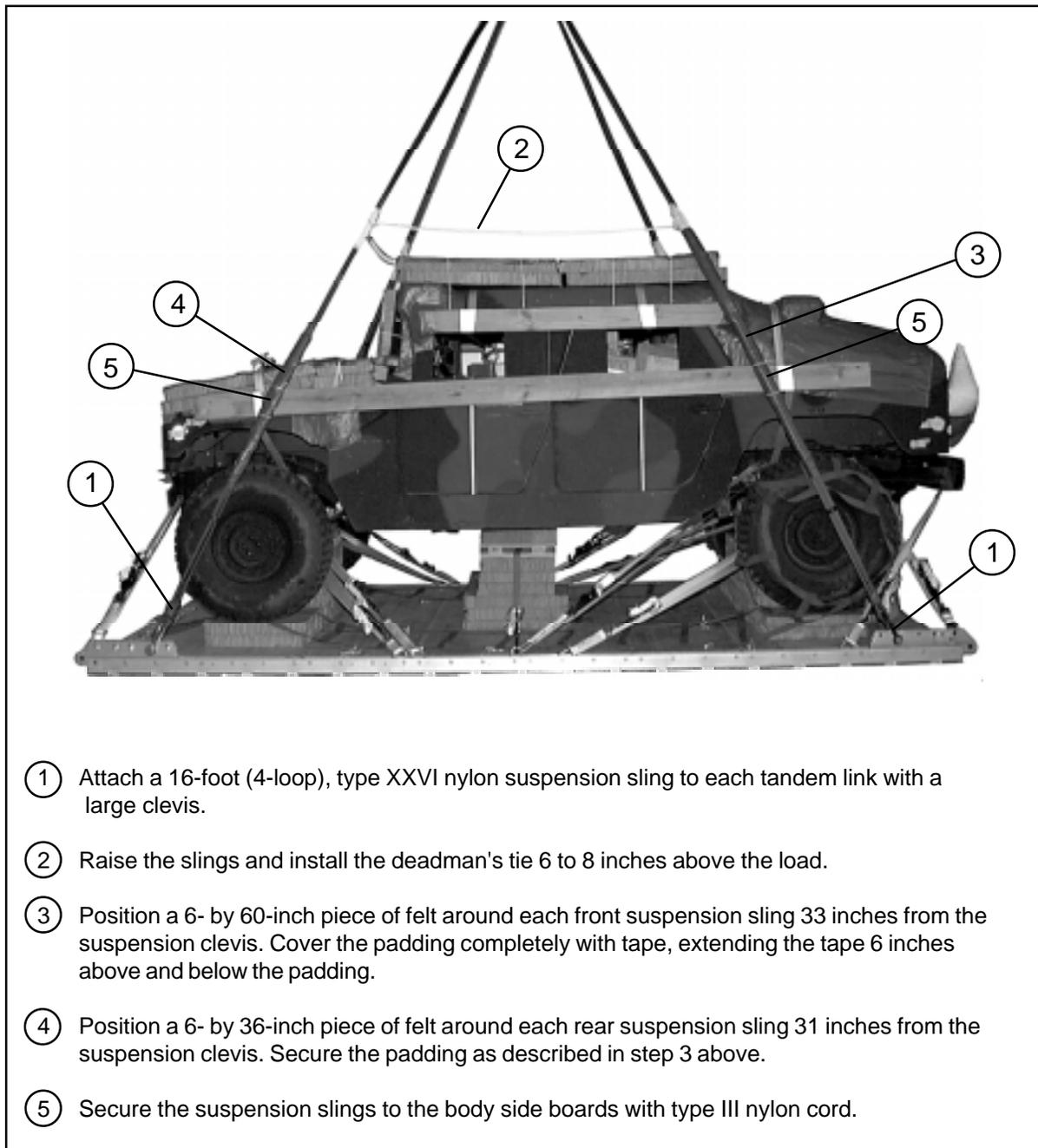


Figure 4-31. Suspension Slings Installed, Padded and Safety Tied

STOWING CARGO PARACHUTES

4-23. Stow and restrain three G-11 cargo parachutes on the load according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-32.

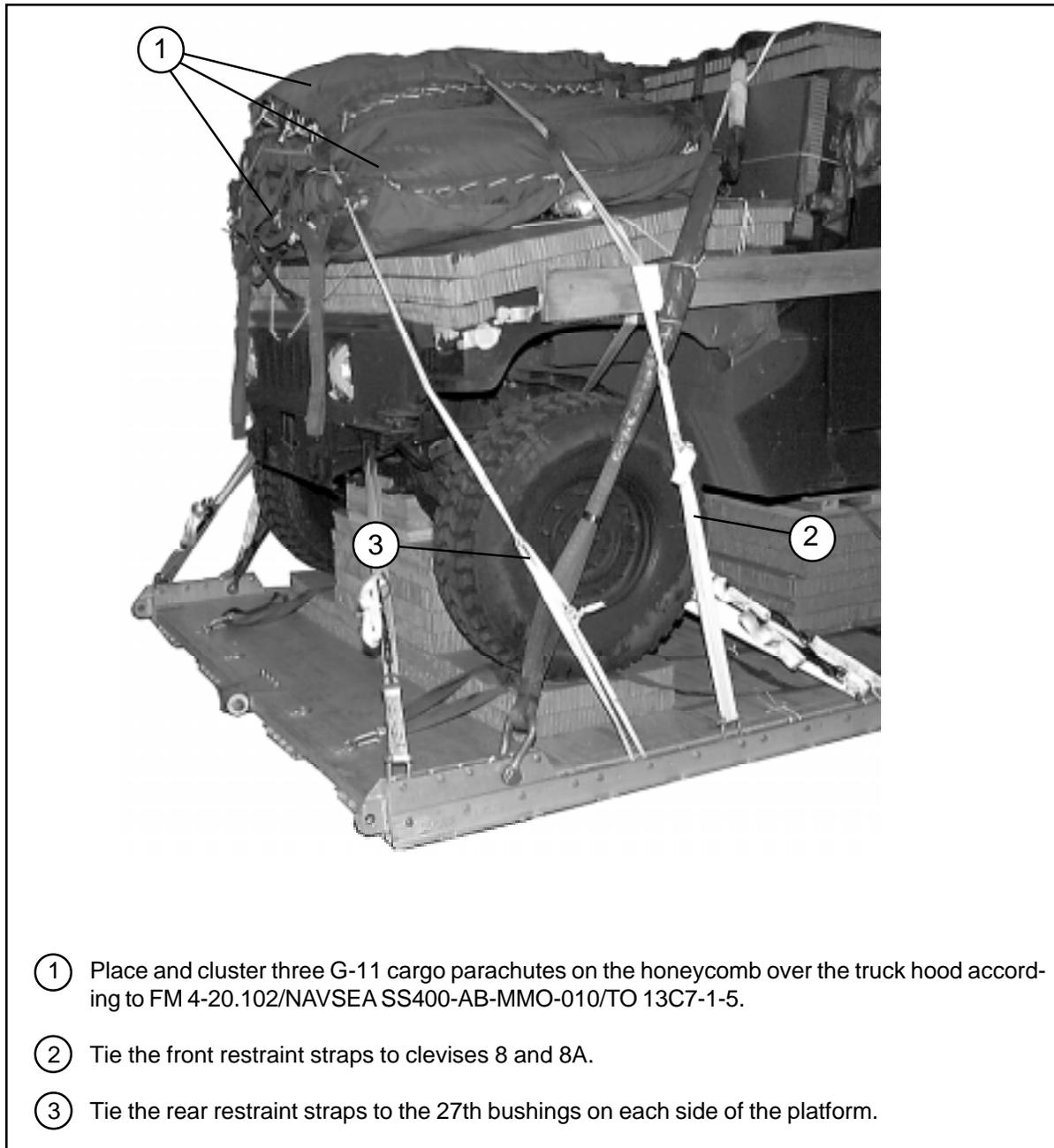
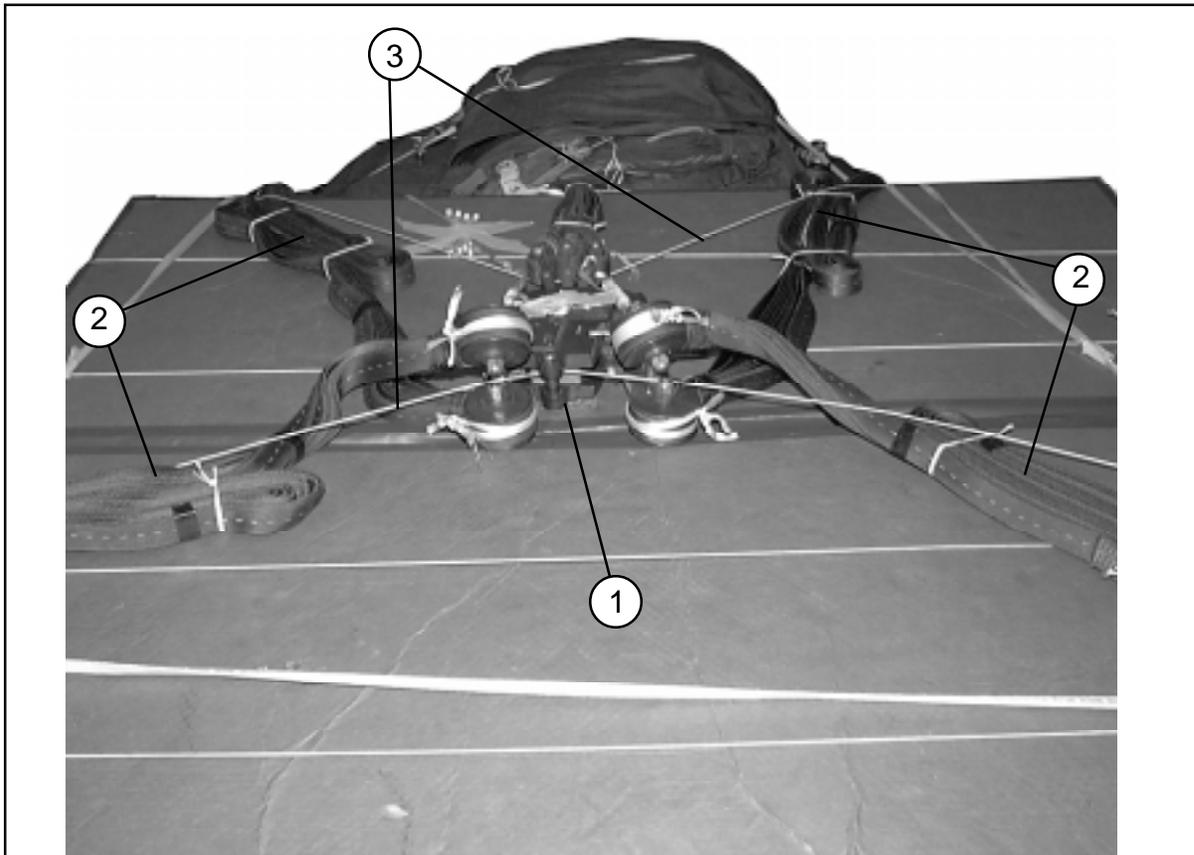


Figure 4-32. Cargo Parachutes Installed

INSTALLING PARACHUTE RELEASE

4-24. Prepare and install an M-2 cargo parachute release according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-33.



Note: The M-2 cargo parachute release is used on this load to accommodate the 4-loop suspension slings.

- ① Place the M-2 release on the roof honeycomb in front of the parachutes.
- ② S-fold the slack in the suspension slings. Tie the folds with type I, 1/4-inch cotton webbing.
- ③ Attach the suspension slings and the riser extensions to the release. Tie the release to convenient points on the load with type III nylon cord.

Figure 4-33. M-2 Release Installed

INSTALLING EXTRACTION SYSTEM

4-25. Install the EFTC extraction system according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-34.

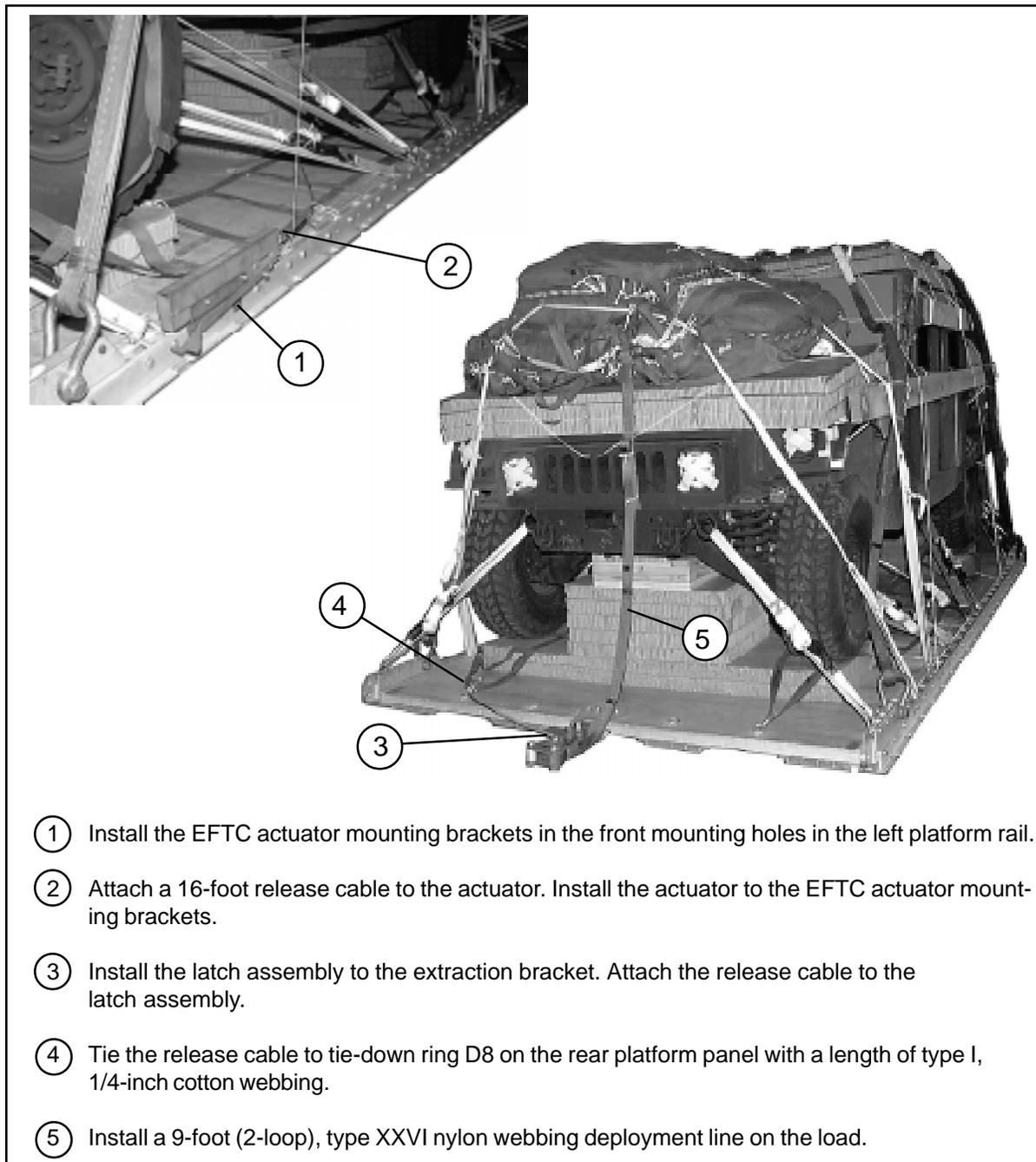


Figure 4-34. EFTC Installed

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

4-26. Install provisions for emergency restraints according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

PLACING EXTRACTION PARACHUTE

4-27. Select the extraction parachute and extraction line needed, using the extraction line requirements table in FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Rig the extraction line in a line bag according to TM 10-1670-286-20/TO 13C5-2-41. Place the extraction parachute and extraction line on the load for installation in the aircraft.

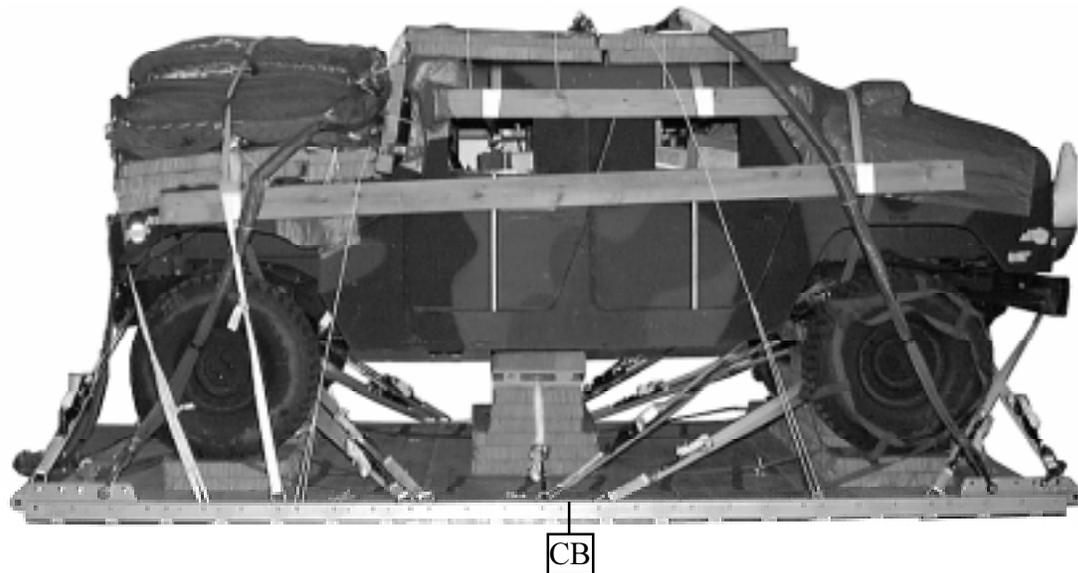
MARKING RIGGED LOAD

4-28. Mark the rigged load according to FM 4-20.102/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-35. Complete Shipper's Declaration for Dangerous Goods according to AFJMAN 24-204/TM 38-250. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

EQUIPMENT REQUIRED

4-29. Use the equipment listed in Table 4-2 to rig this load.

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



RIGGED LOAD DATA

Weight: Load shown	15,240 pounds
Maximum load allowed... ..	15,240 pounds
Height (with three G-11B parachutes)	98 inches
Width	108 inches
Length (overall)	210 inches
Overhang: Front	0 inches
Rear (EFTC)	18 inches
CB (from front edge of platform)	92 inches

Figure 4-35. M1114 Up-Armored Armament Carrier Rigged for Low-Velocity Airdrop

Table 4-2. Equipment Required for Rigging the M1114 Up-Armored Armament Carrier 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 assembly, airdrop, extraction force transfer with cable, 16-ft	1
1670-00-360-0328	Cover, clevis, large	1
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-958-3685	Felt, 1/2-in thick	As required
1670-01-183-2678	Leaf, extraction line (line bag)	2
1670-01-035-6054	Bridle, extraction line bag (for C-17)	1
1670-01-064-4452	Line, drogue (for C-17) 60-ft (1-loop), type XXVI	1
1670-01-062-6313	Line, extraction: For C-130: 60-ft (3-loop), type XXVI	1
1670-01-107-7651	For C-141: 140-ft (3-loop), type XXVI	1
1670-01-062-6313	For C-5: 60-ft (3-loop), type XXVI and	1
1670-01-107-7651	140-ft (3-loop), type XXVI	1
1670-01-107-7651	For C-17: 140-ft (3-loop), type XXVI	1
5306-00-435-8994	Link assembly, Two-point: Bolt, 1-in diam, 4-in long	1 (2)
5310-00-232-5165	Nut, 1-in, hexagonal	(2)
1670-00-003-1953	Plate, side, 3 3/4-in	(2)
5365-00-007-3414	Spacer, large	(2)
5510-00-220-6146	Lumber: 2- by 4-in	As required
5510-00-220-6448	2- by 6-in	As required
5510-00-220-6274	4- by 4-in	As required
5315-00-010-4659	Nail, steel wire, 8d	As required

Table 4-2. Equipment Required for Rigging the M1114 Up-Armored Armament Carrier for Low-Velocity Airdrop (continued)

National Stock Number	Item	Quantity
1670-00-753-3928	Pad, energy-dissipating (honeycomb) 3- by 36- by 96-in	13 sheets
1670-01-016-7841	Parachute: Cargo: G-11B	3
1670-01-063-3716	Cargo extraction: 22-ft (for C-17 aircraft, use H-block with this parachute)	1
1670-01-063-3715	Drogue (for C-17) 15-ft	1
1670-01-353-8425	Platform, airdrop, type V, 16-ft Bracket assembly, EFTC	(1)
1670-01-162-2372	Clevis assembly, type V	(20)
1670-01-353-8424	Bracket assembly, extraction	(1)
1670-01-162-2381	Tandem link assembly (Multipurpose link)	(4)
5530-00-128-4981	Plywood, 3/4-in	5 sheets
1670-01-097-8817	Release, cargo parachute, M-2	1
1670-01-062-6308	Sling, cargo, airdrop For suspension: 16-ft 4-loop), type XXVI nylon webbing	4
1670-01-062-6304	For lifting: 9-ft (2-loop), type XXVI nylon webbing	2
1670-01-062-6303	12-ft (2-loop), type XXVI nylon webbing	2
1670-01-062-6304	For deployment: 9-ft (2-loop), type XXVI nylon webbing	1
1670-01-062-6313	For riser extension: 60-ft (3-loop), type XXVI nylon webbing	3
5340-00-040-8219	Strap, parachute release, multi-cut, comes w/ 3 knives	2
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tie-down assembly, 15-foot	28
1670-01-344-0825	Vehicle drive-off aid	1
8305-00-268-2411	Webbing: Cotton, 1/4-in, type I	As required
8305-00-082-5752	Nylon, tubular, 1/2-in	As required
8305-00-263-3591	Type VIII	As required

SECTION III - RIGGING M1151 ARMAMENT CARRIER WITH ACCOMPANYING LOAD ON A 16-FOOT PLATFORM

DESCRIPTION OF LOAD

4-30. The M1151 HMMWV shown in Figure 4-36 is rigged with an accompanying load on a 16-foot, type V platform. The load uses three G-11 cargo parachutes and the accompanying load has a minimum weight of 1,300 pounds and a maximum weight of 2,000 pounds. This load is 93 inches high, 108 inches wide, and 215 inches long.

PREPARING PLATFORM

4-31. Prepare a 16-foot, type V airdrop platform according to TM 10-1670-268-20&P/TO 13C7-52-22. Install four tandem links and platform clevises according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 4-37.

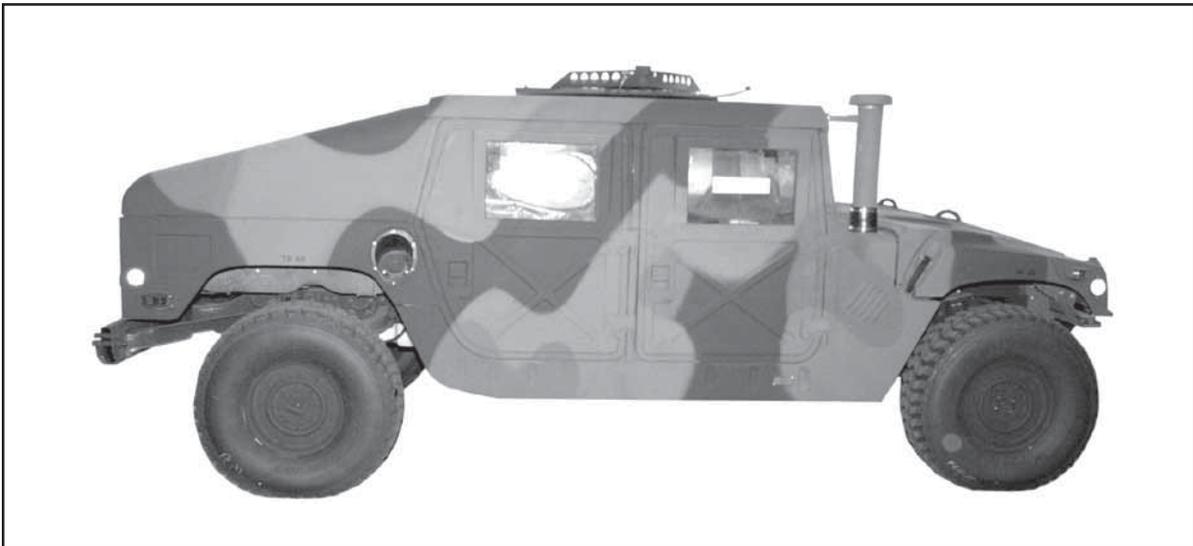
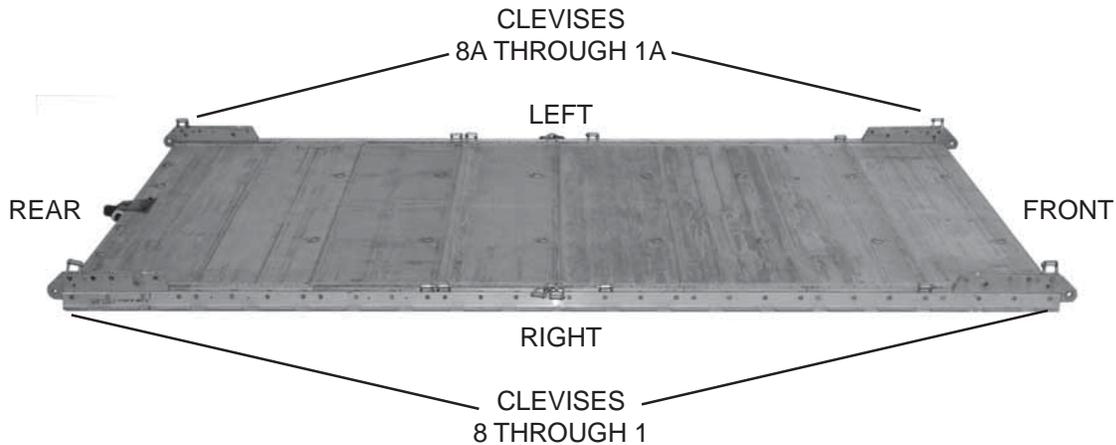


Figure 4-36. M1151 Armament Carrier

- NOTES:**
1. The nose bumper may or may not be installed.
 2. Measurements given in the chapter are from the front edge of the platform, NOT from the front edge of the nose bumper.



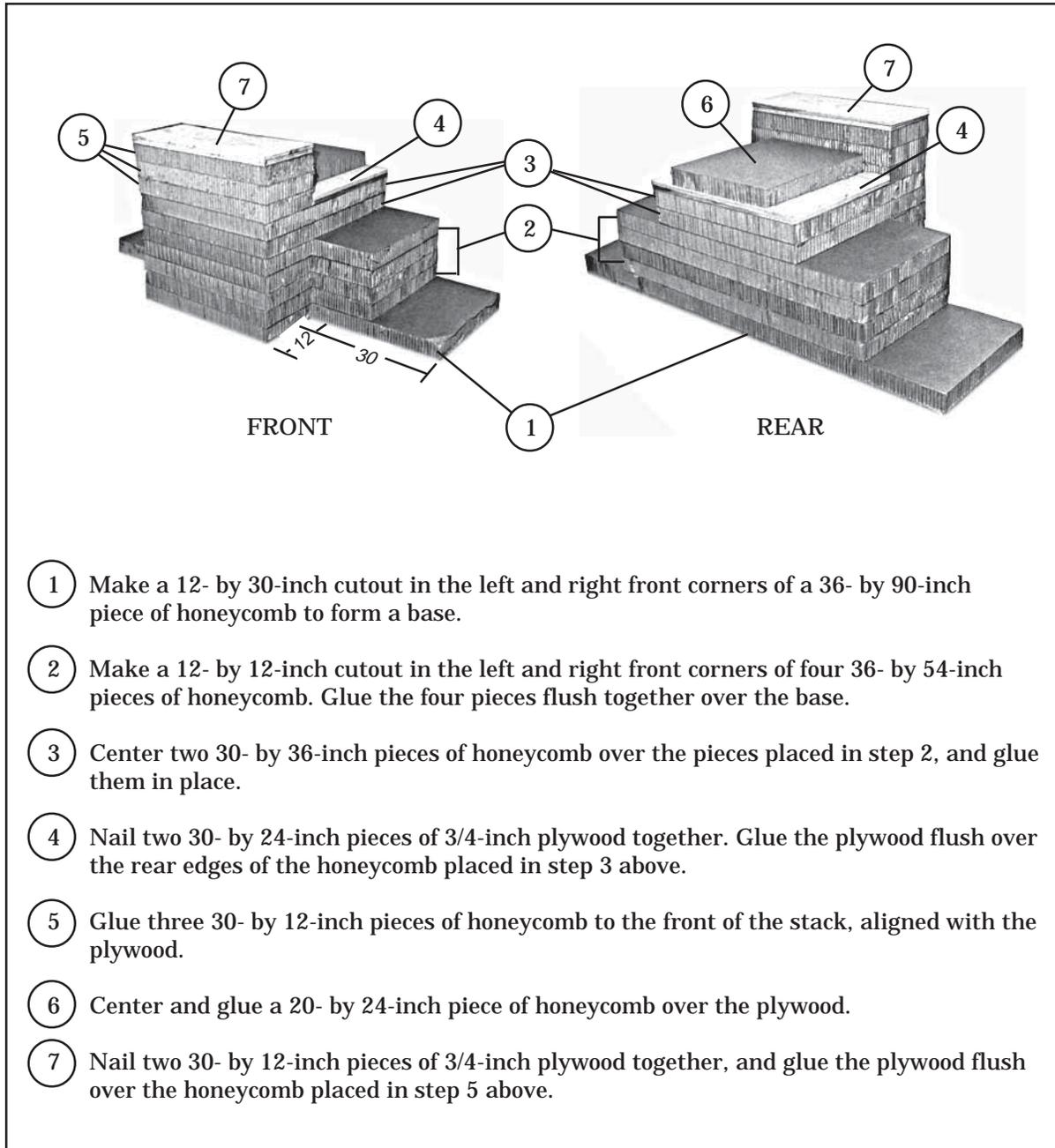
Steps:

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 1 on each front tandem link.
4. Install a clevis on bushing 4 on 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, 15, 17 (tripled), 20, and 21.
6. Starting at the front of the platform, number the clevises bolted to the right side from 1 through 8 and those bolted to the left side from 1A through 8A.
7. Label the tie-down rings according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

Figure 4-37. Platform Prepared

PREPARING AND POSITIONING HONEYCOMB STACKS

4-32. Build the honeycomb stacks as shown in Figures 4-38 through 4-40. Position the stacks on the platform as shown in Figure 4-41.



- 1 Make a 12- by 30-inch cutout in the left and right front corners of a 36- by 90-inch piece of honeycomb to form a base.
- 2 Make a 12- by 12-inch cutout in the left and right front corners of four 36- by 54-inch pieces of honeycomb. Glue the four pieces flush together over the base.
- 3 Center two 30- by 36-inch pieces of honeycomb over the pieces placed in step 2, and glue them in place.
- 4 Nail two 30- by 24-inch pieces of 3/4-inch plywood together. Glue the plywood flush over the rear edges of the honeycomb placed in step 3 above.
- 5 Glue three 30- by 12-inch pieces of honeycomb to the front of the stack, aligned with the plywood.
- 6 Center and glue a 20- by 24-inch piece of honeycomb over the plywood.
- 7 Nail two 30- by 12-inch pieces of 3/4-inch plywood together, and glue the plywood flush over the honeycomb placed in step 5 above.

Figure 4-38. Stack 1 Constructed

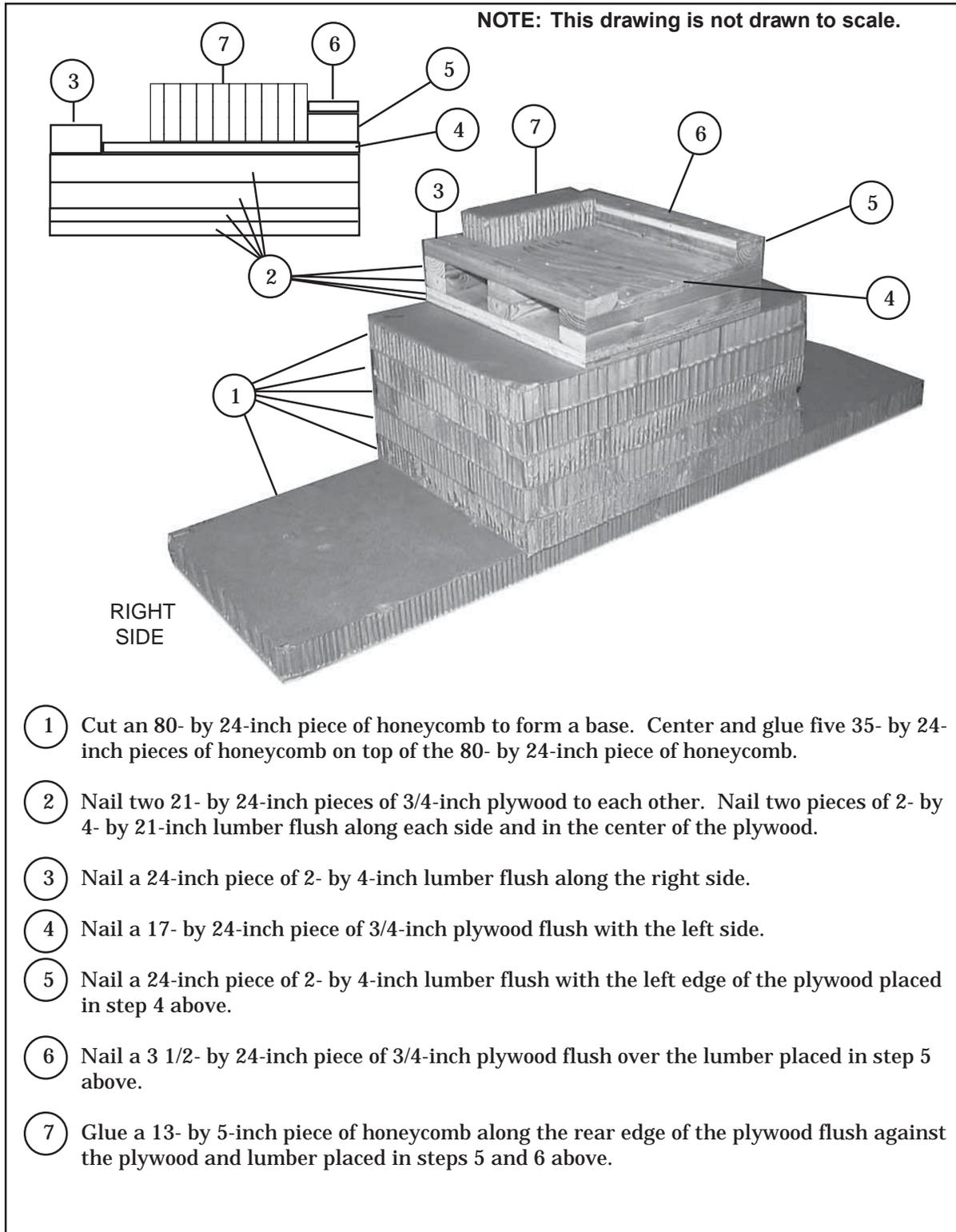
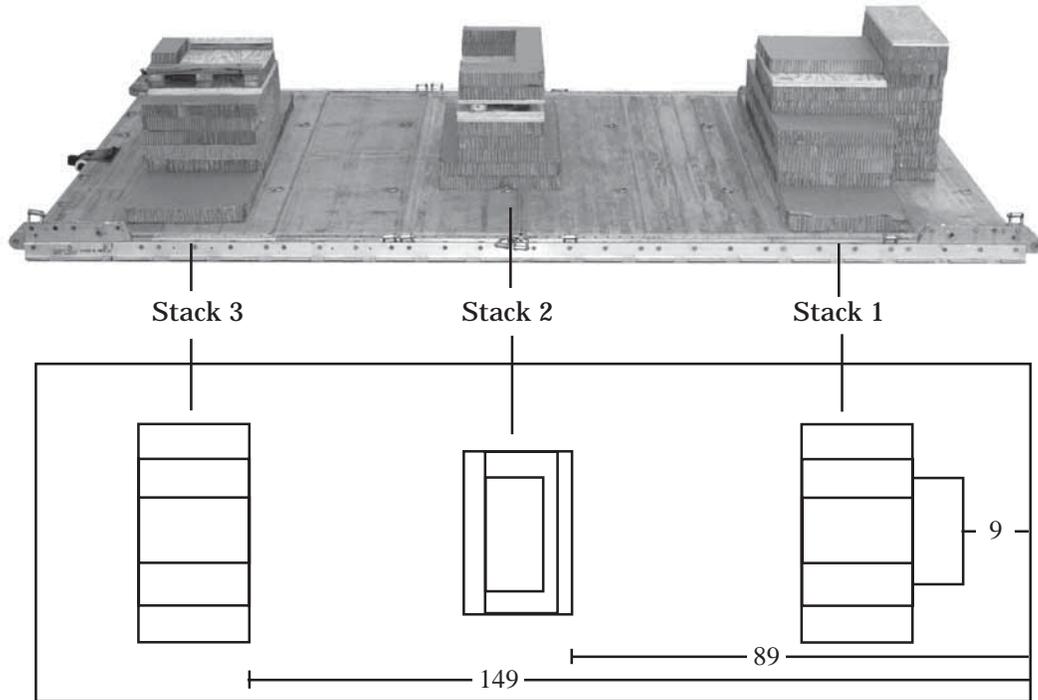


Figure 4-40. Stack 3 Constructed

NOTES: 1. This drawing is not drawn to scale.
 2. All dimensions are in inches.



Stack Number	Position of Stack on Platform
1	Place stack: Centered 9 inches from front edge of platform.
2	Centered 89 inches from front edge of platform.
3	Centered 149 inches from front edge of platform.

Figure 4-41. Honeycomb Stacks Positioned on Platform

PREPARING THE TRUCK

4-33. Prepare the truck as described in paragraphs 2-4a through e, g, and h, and as shown in Figures 2-6 and 2-7, 2-8 (omit steps 1 and 3), 2-9, 2-11, and 2-12. Further prepare the closed-body HMMWV as shown in Figures 4-42 and 4-43.

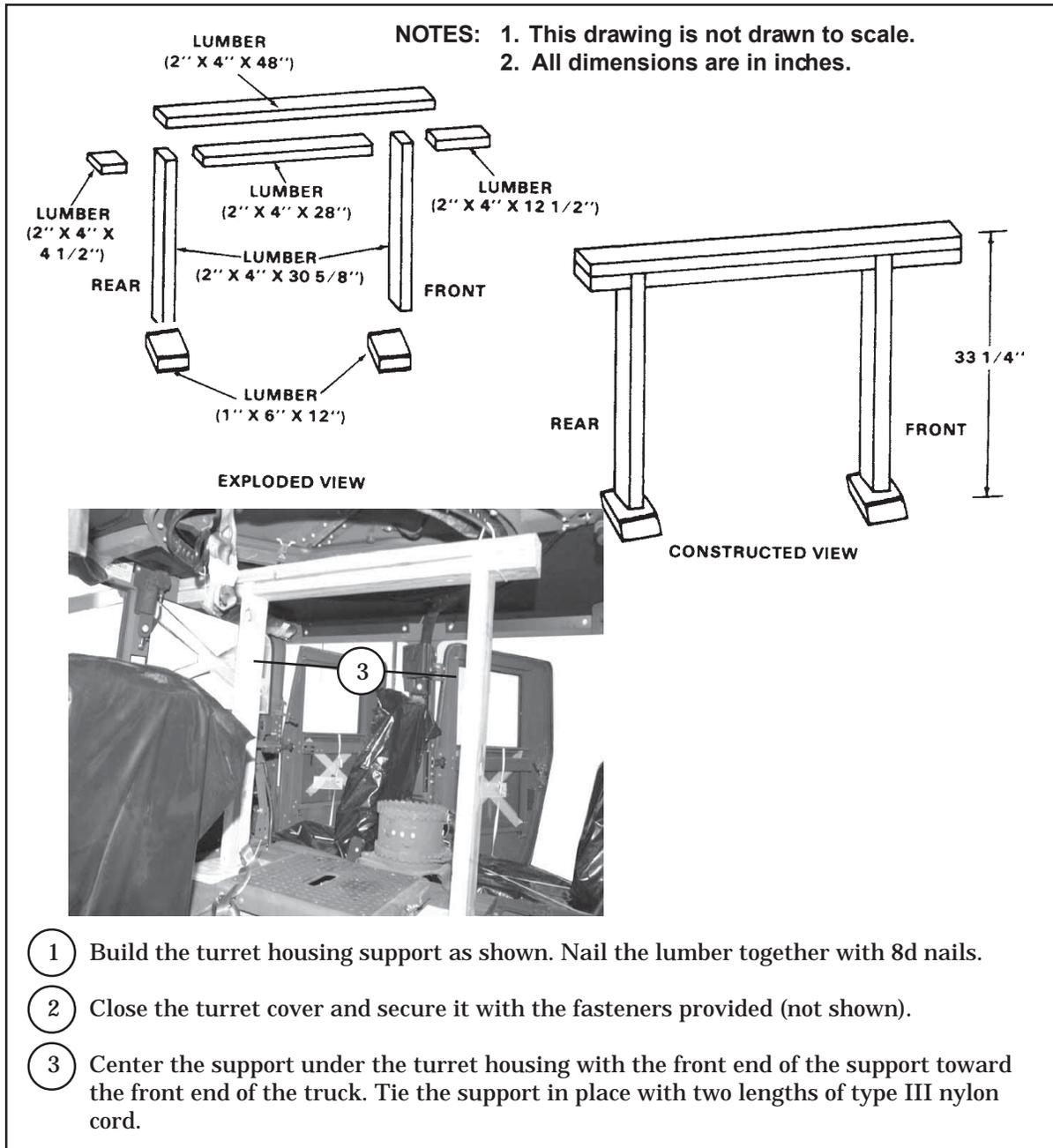
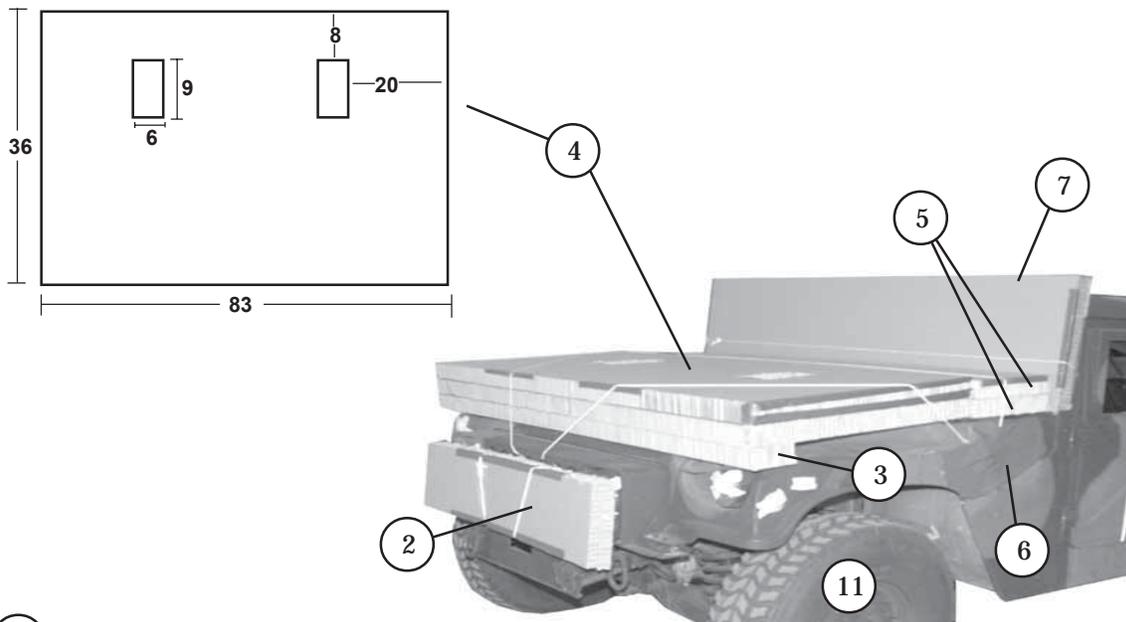


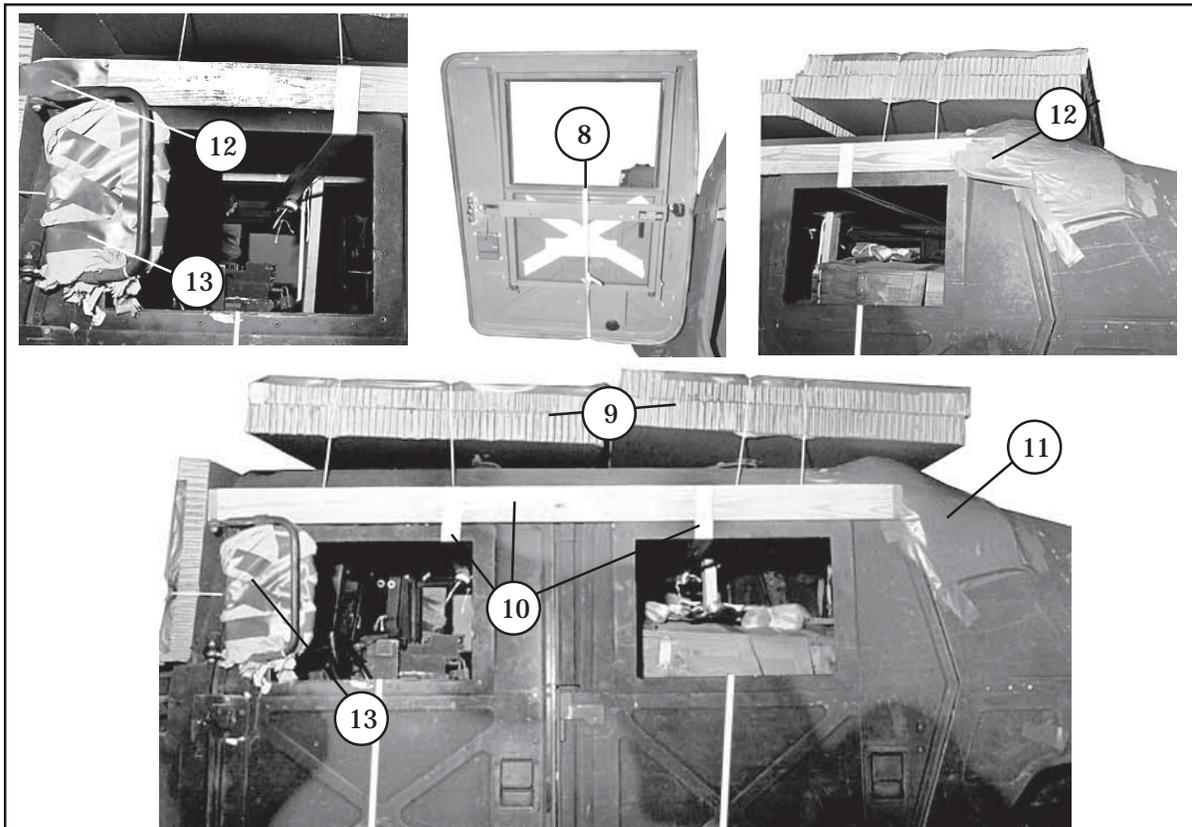
Figure 4-42. Turret Support Built and Placed

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



- 1 Tape all lights and reflectors.
- 2 On trucks equipped with the brush guard, cover the front side with an 83- by 14-inch piece of honeycomb tied in place with type III nylon cord.
- 3 Center an 83- by 6-inch piece of honeycomb along the front edge of the hood.
- 4 Place two 36- by 83-inch pieces of honeycomb, with cutouts as shown, over the hood. Tape the upper edges of the top piece. Tie the honeycomb in place with a length of type III nylon cord. Tie the cord to a hood latch, pass it through the grille, and tie off to the other hood latch.
- 5 Place two 83- by 15-inch pieces of honeycomb just behind the honeycomb placed in step 2 above. Tape the top outside edges. Secure the honeycomb to the hood latch brackets with type III nylon cord.
- 6 Tape the hood latches.
- 7 Lower all side windows and open the truck doors. Place a 21- by 83-inch piece of honeycomb against the windshield. Tie a length of type III nylon cord around the honeycomb and the inside of the windshield frame.

Figure 4-43. Truck Body Prepared

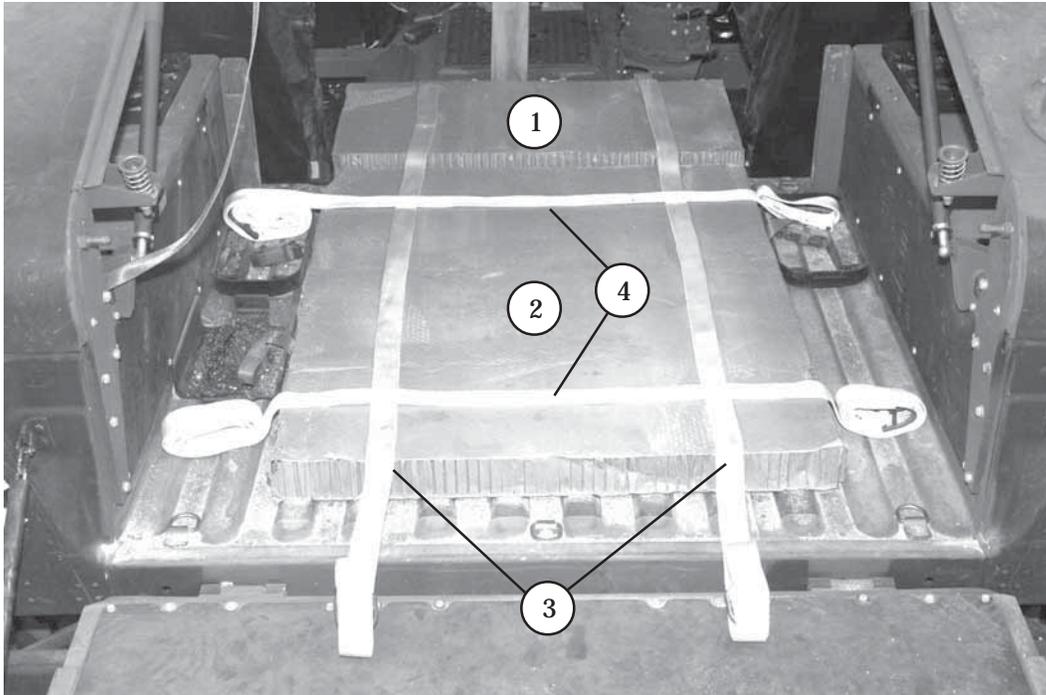


- 8 Secure the window in the down position with a length of 1/2-inch tubular nylon webbing. Secure with a slip knot on the inside of the door.
- 9 Cover the roof with four 82- by 36-inch pieces of honeycomb. Tape the upper 36-inch edges. Tie four lengths of type III nylon cord over the honeycomb and through the door openings.
- 10 Pass 15-foot lashings through the door openings on each side of the truck and close the doors. Cut a 45-degree bevel in each end of two pieces of 2- by 4- by 69 1/2-inch lumber. Rest the long side of each piece of lumber over the window openings and even with the front edge of the windshield frame. Pass the free ends of the lashings down over the lumber and through the windows. Secure the lashings inside the truck.
- 11 Pad the upper rear corner of the door and the end of the rain gutter with a 12- by 12- inch piece of felt taped in place.
- 12 Tape the front and rear ends of the lumber to the windshield frame and to the padding over the rear gutter.
- 13 Pad the mirrors with cellulose wadding taped in place. Fold the mirrors inward and tie them together through the cab of the truck.

Figure 4-43. Truck Body Prepared (continued)

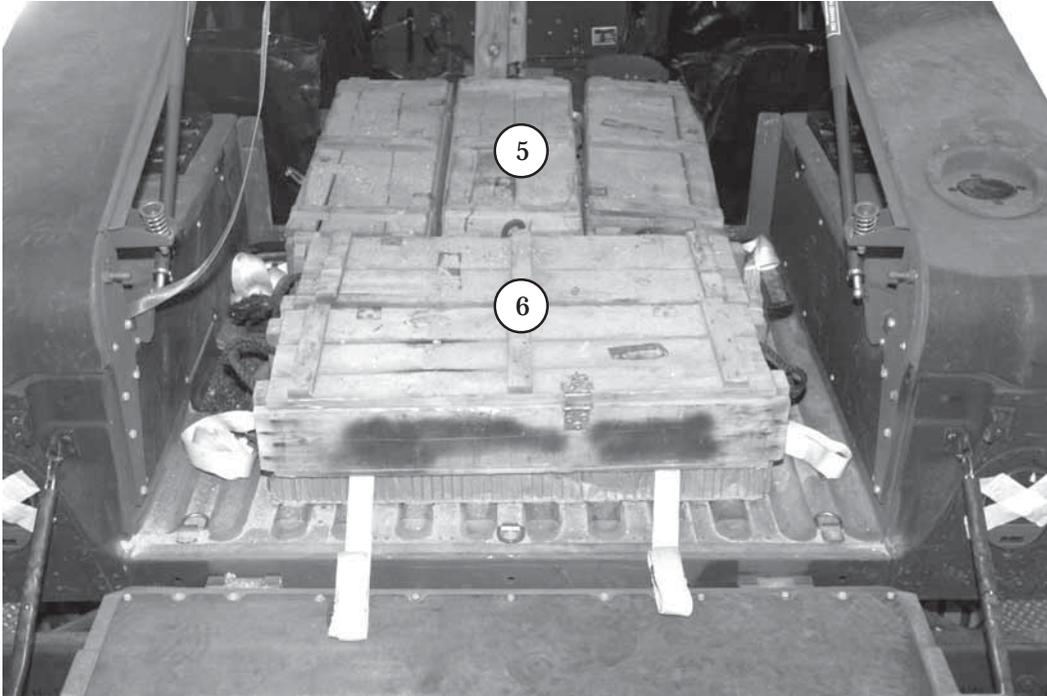
STOWING ACCOMPANYING LOAD

4-34. Stow an accompanying load of 1,300 to 2,000 pounds in the cargo area of the truck. Use or adapt the procedures shown in Figure 4-44. Make sure the accompanying load complies with the restrictions outlined in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.



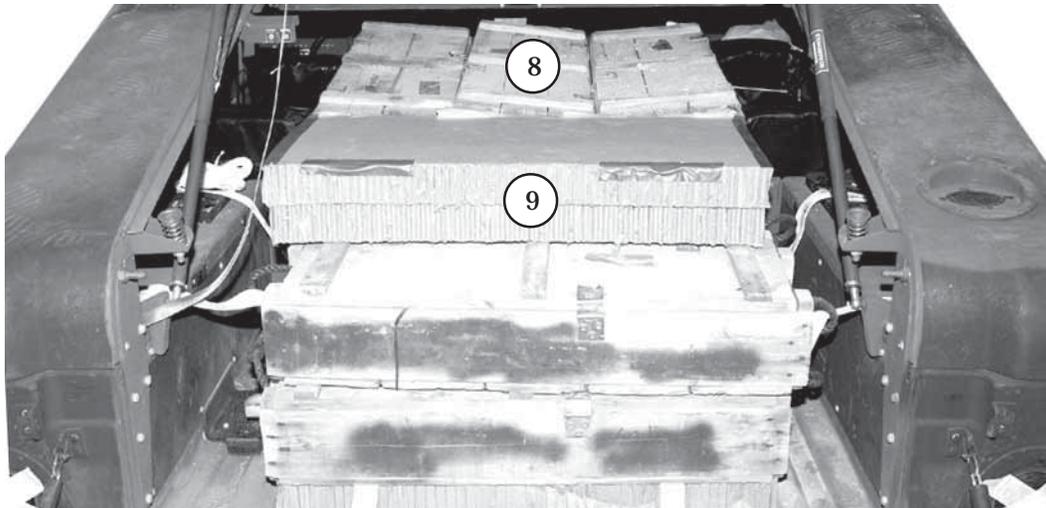
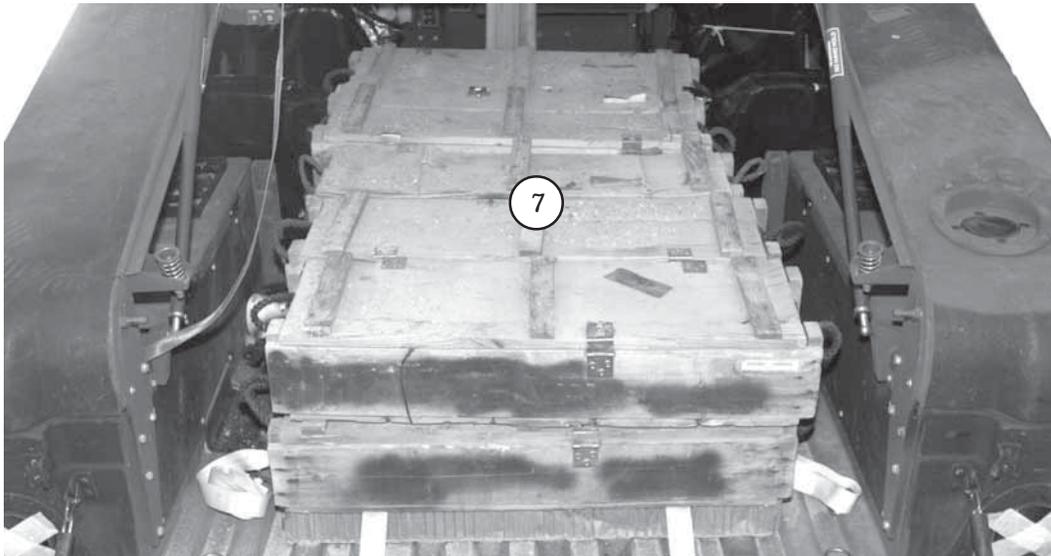
- ① Cut a 36- by 16-inch piece of honeycomb and position it against the rear turret support.
- ② Cut a 36- by 43-inch piece of honeycomb and position it against the honeycomb in step 1.
- ③ Position two 15-foot lashings lengthwise 6 inches from each outside edge of honeycomb.
- ④ Position two 15-foot lashings widthwise 6 inches from the front and rear edge of the honeycomb positioned in step 1 and 2.

Figure 4-44. Accompanying Load Stowed in Truck



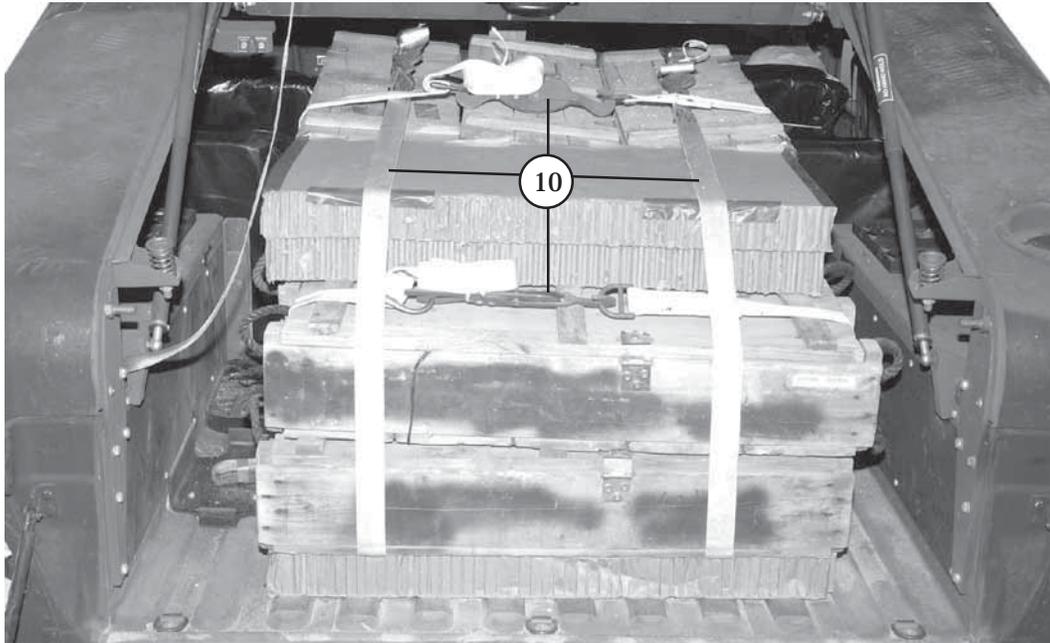
- 5 Position three 105-mm ammunition boxes lengthwise on top of the honeycomb. The boxes should be flush with the front edge of the 36- by 16-inch piece of honeycomb. Ensure the 15-foot lashing is running widthwise under the rear end of the ammunition boxes.
- 6 Position two 105-mm ammunition boxes widthwise flush against the ammunition boxes in step 5. Ensure the 15-foot lashing is running widthwise and is centered under the rear ammunition box.

Figure 4-44. Accompanying Load Stowed in Truck (Continued)



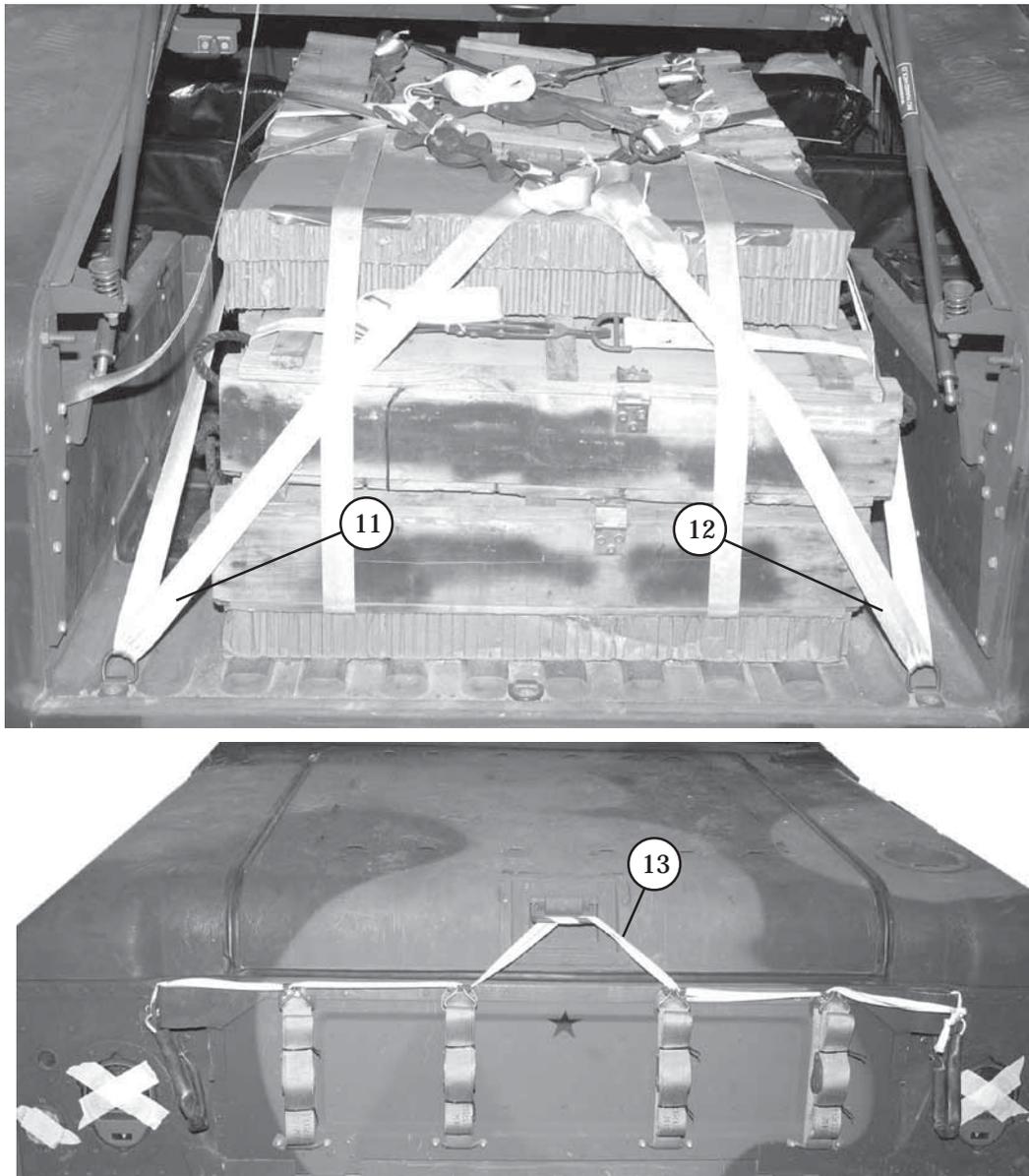
- 7 Position five ammunition boxes widthwise on top of the first layer of ammunition. The boxes should be flush with the bottom edges against the turret support.
- 8 Position three ammunition boxes lengthwise flush against the turret support on top of the previously placed ammunition boxes.
- 9 Cut two 17- by 36-inch pieces of honeycomb and position them to the rear of the boxes in step 8. Tape the edge of the honeycomb where the lashing makes contact.

Figure 4-44. Accompanying Load Stowed in Truck (Continued)



⑩ Secure the four pre-positioned lashings and secure with a D-ring and load binder.

Figure 4-44. Accompanying Load Stowed in Truck (Continued)



- ①① Route a 30-foot lashing through the left rear tie-down ring. Bring both ends over the boxes diagonally. Route the lashing through the right front tie-down ring. Secure the lashing over the load making sure to split the lashing on the corners.
- ①② Repeat step 11 using the right rear and left front tie-down rings.
- ①③ Close and latch the tailgate and hatch. Fold and tape the cargo straps. Run a length of 1/2-inch tubular nylon webbing under the cargo straps and through the hatch cover handle. Tie the running ends to the tailgate hook brackets.

Figure 4-44. Accompanying Load Stowed in Truck (Continued)

LIFTING AND POSITIONING TRUCK AND INSTALLING OPTIONAL DRIVE-OFF AIDS

4-35. Install the optional drive-off aids on the platform as shown in Figure 2-15. Install lifting slings on the truck as shown in Figure 2-16 and position the truck as shown in Figure 4-45.

LASHING TRUCK

4-36. Lash the truck to the platform with fifteen 15-foot tie-down assemblies as shown in Figures 4-46 and 4-47, and according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

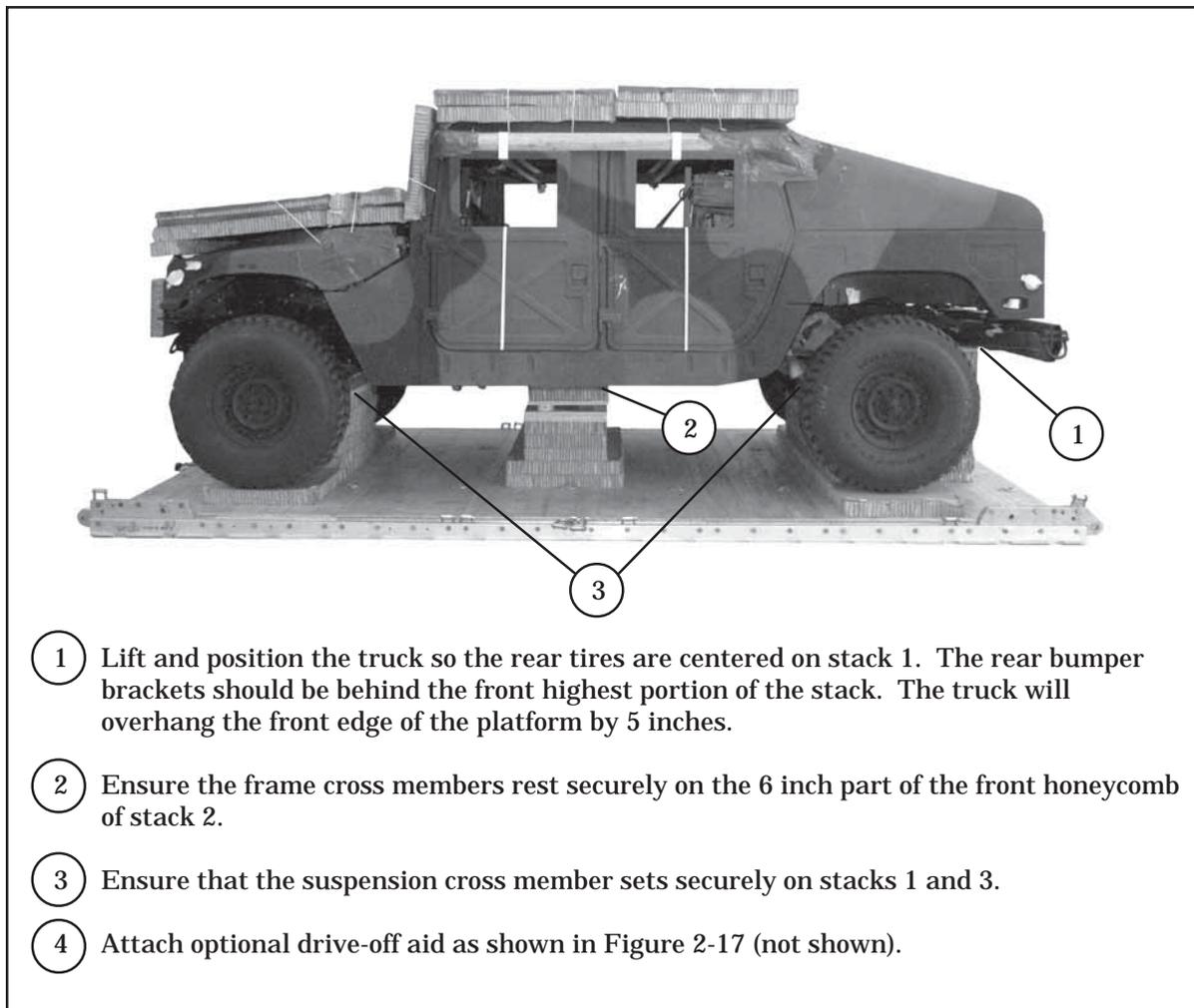
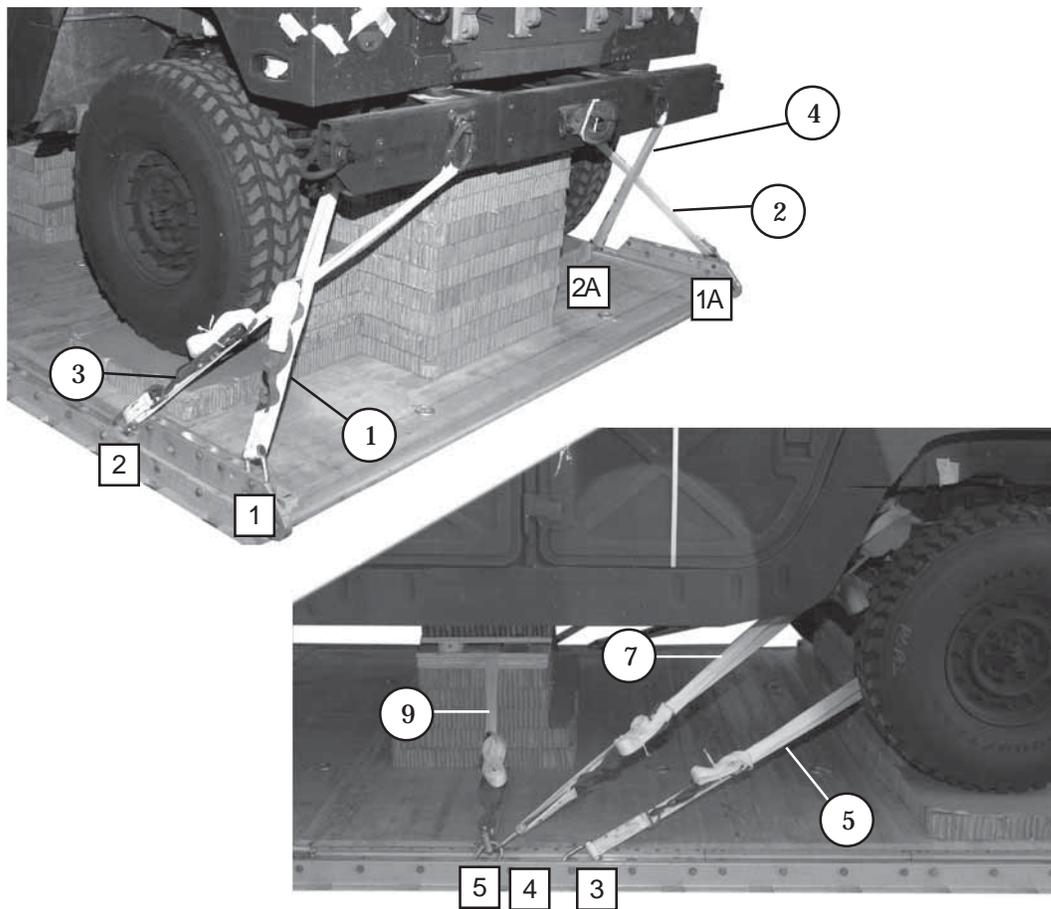
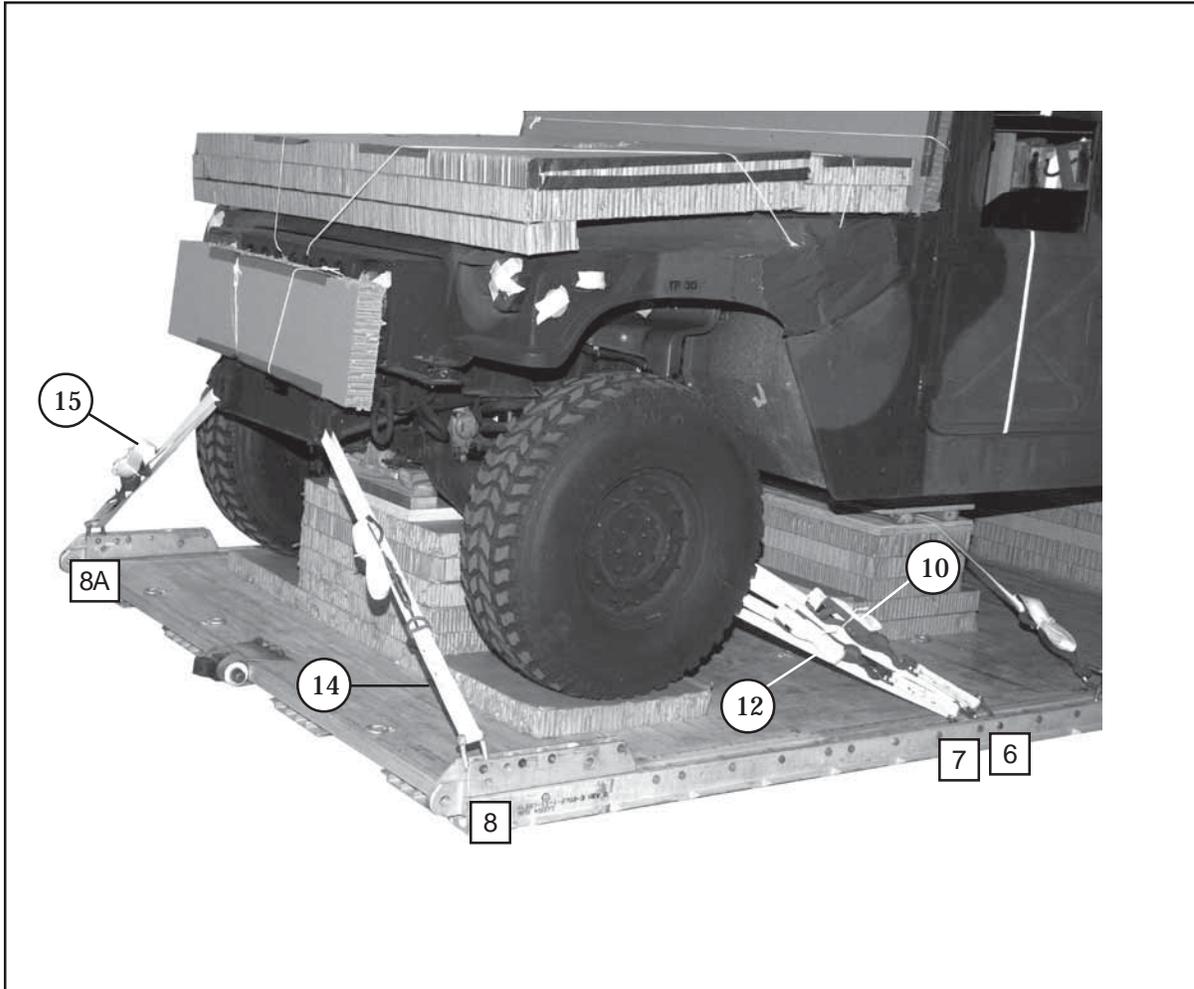


Figure 4-45. Truck Positioned



Lashing Number	Tie-down Clevis Number	Instructions
1	1	Pass lashing:
2	1A	Through tie-down bracket behind left rear coil spring.
3	2	Through tie-down bracket behind right rear coil spring.
4	2A	Through left rear lifting shackle.
5	3	Through right rear lifting shackle.
6	3A	Around left rear lower control arm.
7	4	Around right rear lower control arm.
8	4A	Through tie-down bracket in front of left rear coil spring.
9	5 and 5A	Through tie-down bracket in front of right rear coil spring.
		Pass a 15-foot lashing through clevis 5A and through its own D-ring. Pass the lashing through the hole in stack 2. Attach the lashing to clevis 5 with a load binder.

Figure 4-46. Lashings 1 Through 9 Installed



Lashing Number	Tie-down Clevis Number	Instructions
10	6	Pass lashing: Through tie-down bracket behind left front coil spring.
11	6A	Through tie-down bracket behind right front coil spring (not shown).
12	7	Around left lower control arm.
13	7A	Around right lower control arm (not shown).
14	8	Through tie-down bracket on end of left frame rail.
15	8A	Through tie-down bracket on end of right frame rail.

Figure 4-47. Lashings 10 Through 15 Installed

INSTALLING AND SAFETY TYING SUSPENSION SLINGS

4-37. Install, pad and safety tie four 16-foot 2-loop type XXVI nylon suspension slings as shown in Figure 2-20.

STOWING CARGO PARACHUTES

4-38. Stow and restrain three G-11 cargo parachutes on the load according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-48.

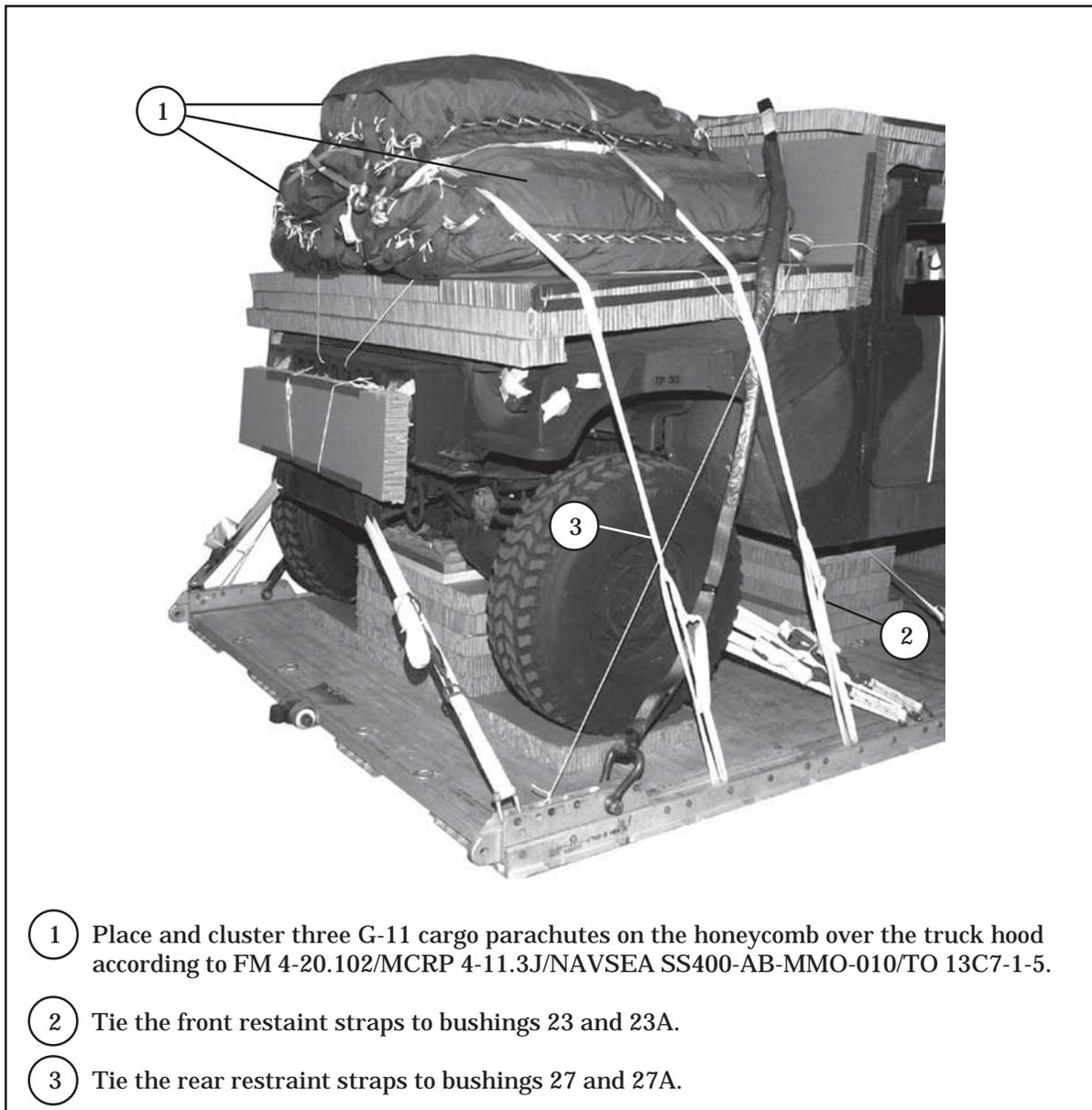
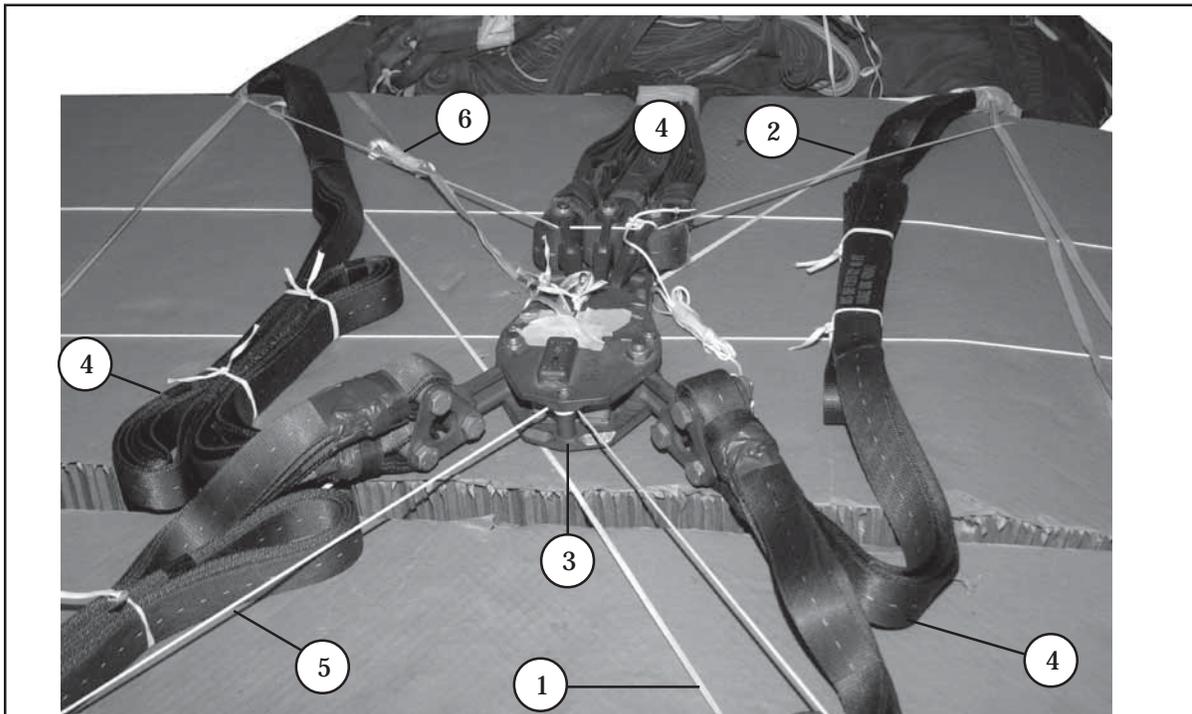


Figure 4-48. Cargo Parachutes Installed

INSTALLING PARACHUTE RELEASE

4-39. Prepare and install an M-1 cargo parachute release according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-49.



- ① Tie a length of type I 1/4-inch cotton webbing to the right rear suspension sling below the deadman's tie. Bring the webbing diagonally over the load to the left front. Pull it taut, and tie it to the left front sling below the deadman's tie.
- ② Tie the left rear and right front suspension slings together in the same way as in step 1 above.
- ③ Place the M-1 release on the roof honeycomb in front of the parachutes.
- ④ Attach the suspension slings and riser extensions according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Fold the excess suspension slings and secure with type I 1/4-inch cotton webbing.
- ⑤ Restrain the release to a convenient point on the load with type III nylon cord.
- ⑥ Secure the arming wire lanyard to the parachute carrying handle and S-fold and tape the excess.

Figure 4-49. M-1 Release Installed

INSTALLING EXTRACTION SYSTEM

4-40. Install the EFTC extraction system according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and as shown in Figure 4-34.

INSTALLING PROVISIONS FOR EMERGENCY RESTRAINTS

4-41. Install provisions for emergency restraints according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5.

PLACING EXTRACTION PARACHUTE

4-42. Select the extraction parachute and extraction line needed, using the extraction line requirements table in FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5. Rig the extraction line in a line bag according to TM 10-1670-286-20/TO 13C5-2-41. Place the extraction parachute and extraction line on the load for installation on the aircraft.

MARKING RIGGED LOAD

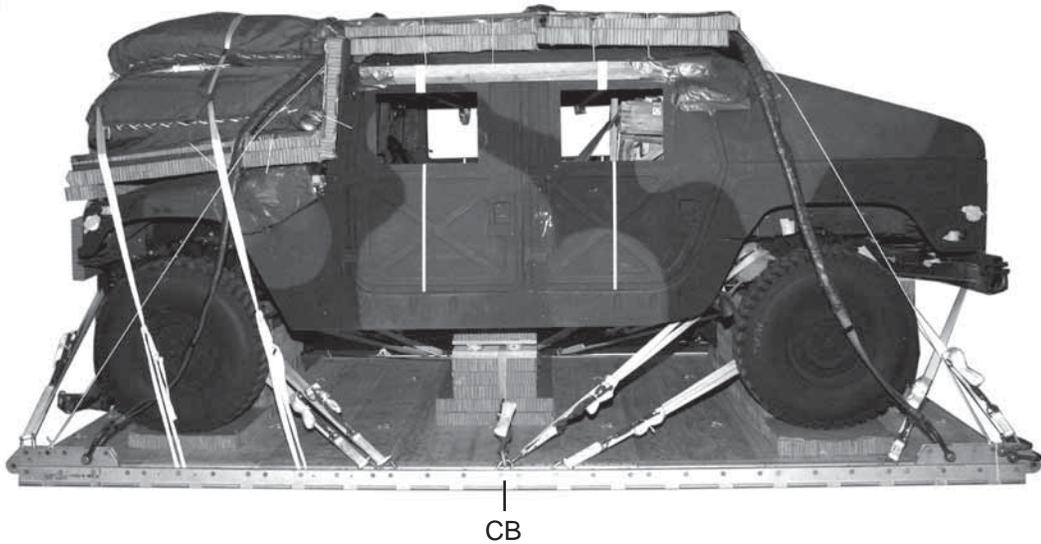
4-43. Mark the rigged load according to FM 4-20.102/MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5, and as shown in Figure 4-50. Complete Shipper's Declaration for Dangerous Goods according to AFMAN 24-204(I)/TM 38-250. If the load varies from the one shown, the weight, height, CB, and parachute requirements must be recomputed.

EQUIPMENT REQUIRED

4-44. Use the equipment listed in Table 4-3 to rig this load.

CAUTION

Make the final rigger inspection required by FM 4-20.102/ MCRP 4-11.3J/NAVSEA SS400-AB-MMO-010/TO 13C7-1-5 and AR 59-4/OPNAVINST 4463.24C/AFJ 13-210(I)/ MCO 13480.1B before the load leaves the rigging site.



RIGGED LOAD DATA

Weight: Load shown	11,340 pounds
Maximum load allowed	12,100 pounds
Height (with three G-11B parachutes)	93 inches
Width	108 inches
Length (overall)	215 inches
Overhang: Front	5 inches
Rear (EFTC)	18 inches
Rear (EPJS)	30 inches
CB (from front edge of platform)	96 inches

Figure 4-50. M1151 Expanded Capacity Armament Carrier

Table 4-3. Equipment Required for Rigging the M1151 Expanded Capacity Armament Carrier for Low-Velocity Airdrop

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
	Clevis, suspension:	
4030-00-090-5354	1-in (large)	5
4030-00-678-8562	3/4-in (medium)	2
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-434-5785	Coupling, airdrop, extraction force transfer with cable, 16-ft	1
	Cover:	
1670-00-360-0328	Clevis, large	3
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
8305-00-191-1101	Felt, 1/2-in thick	As required
1670-00-003-4391	Knife, parachute bag for C-17	1
1670-01-183-2678	Leaf, extraction line (line bag)	2
	Line, drogue (for C-17)	
1670-01-064-4452	60-ft (1-loop), type XXVI	1
	Line, extraction:	
1670-01-062-6313	For C-130: 60-ft (3-loop), type XXVI	1
1670-01-107-7651	For C-17: 140-ft (3-loop), type XXVI	1
	Link Assembly:	
	Two-point:	2
5306-00-435-8994	Bolt, 1-in diam, 4-in long	(4)
5310-00-232-5165	Nut, 1-in, hexagonal	(4)
1670-00-003-1953	Plate, side, 3 3/4-in	(4)
5365-00-007-3414	Spacer, large	(4)
	Lumber:	
5510-00-220-6448	2- by 6-in	As required
5510-00-220-6274	4- by 4-in	As required
5315-00-010-4659	Nail, steel wire, 8d	As required