

Section II

RIGGING TRUCK WITH WINCH FOR LOW-VELOCITY AIRDROP

7-18. Description of Load

The M561, 1 1/4-ton cargo truck with winch (line number X39940) is rigged on a 20-foot, type V airdrop platform with three G-11A or G-11B cargo parachutes. An accompanying load of no more than 2,500 pounds may be airdropped as a part of this load when placed in the carrier body. When the accompanying load weighs more than 2,040 pounds, use three G-11B or four G-11A cargo parachutes. If the truck is rigged for tandem drop, it will be the aft load in the aircraft.

7-19. Preparing Platform

Prepare a 20-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. Attaching and Numbering Tiedown Clevises. Attach 22 tiedown clevises to the platform according to Figure 7-17 and FM 10-500/TO 13C7-1-5. Number them as shown in Figure 7-17.

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.

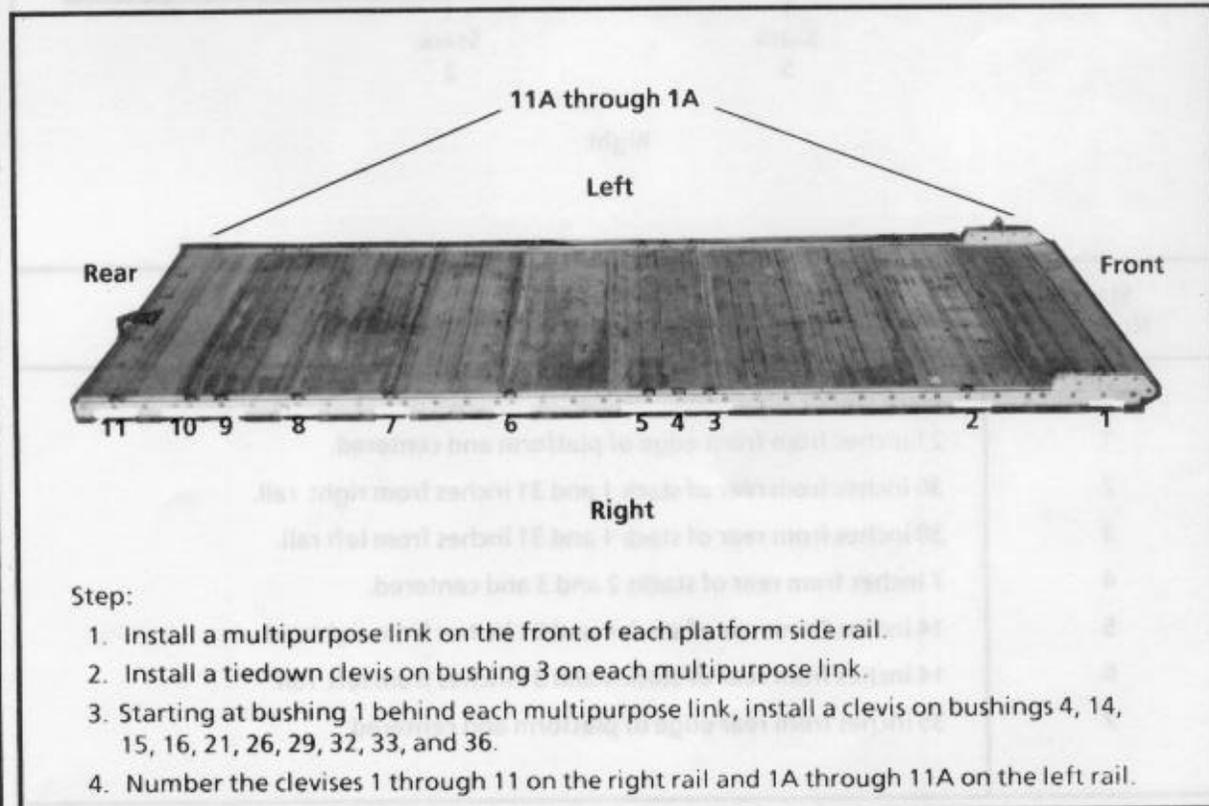
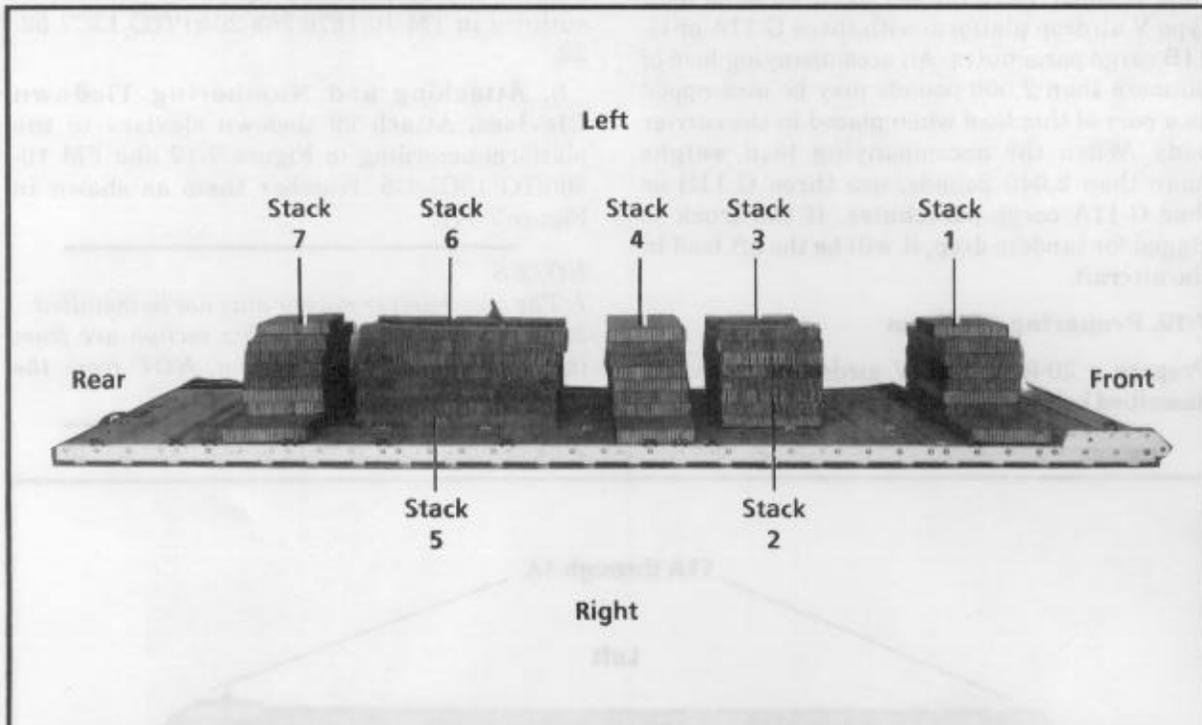


Figure 7-17. Platform prepared

7-20. Building and Placing Honeycomb Stacks

Build the honeycomb stacks according to FM 10-500/TO 13C7-1-5 and as shown in Figure 7-2. Place the stacks on the platform as shown in Figure 7-18.

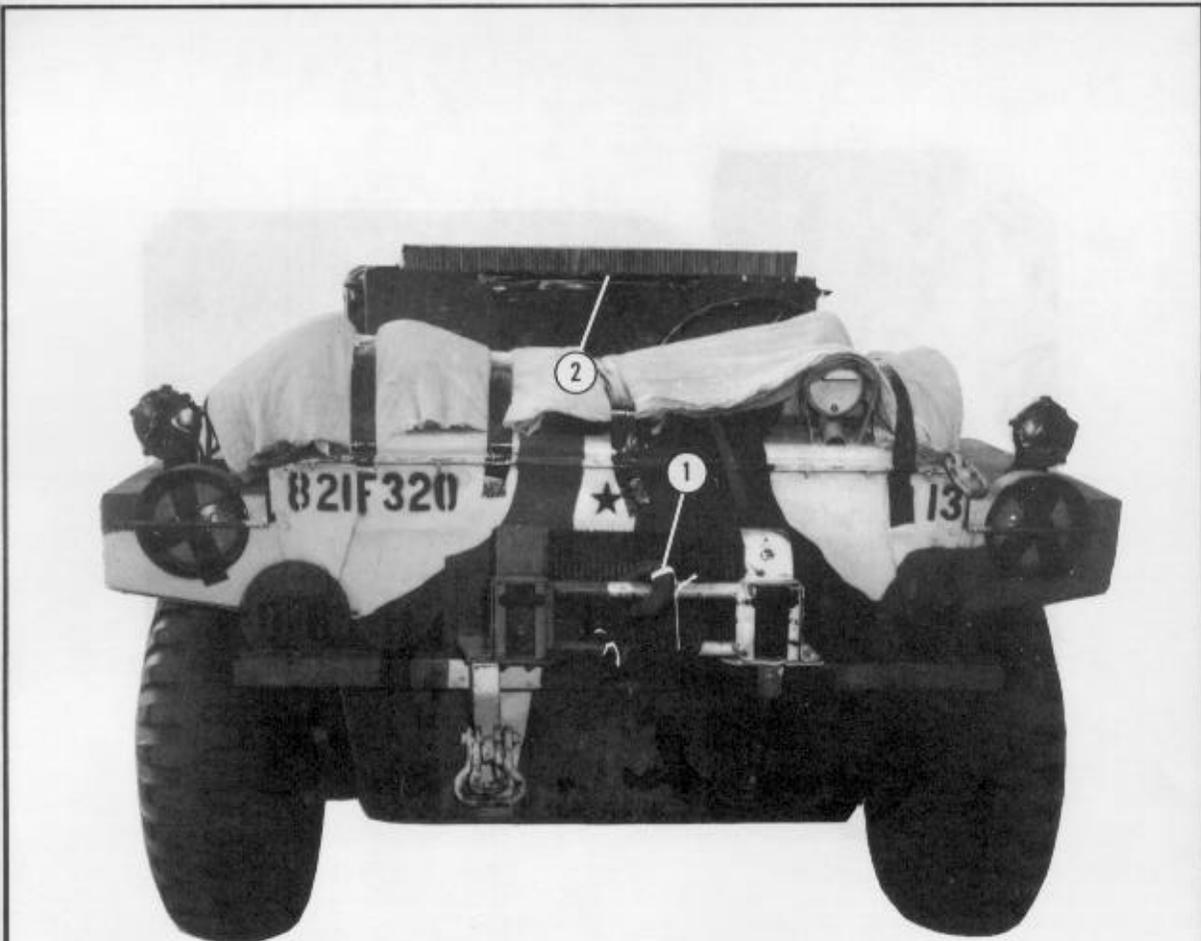


Stack Number	Position of Stack on Platform
1	Place stack: 21 inches from front edge of platform and centered.
2	30 inches from rear of stack 1 and 31 inches from right rail.
3	30 inches from rear of stack 1 and 31 inches from left rail.
4	7 inches from rear of stacks 2 and 3 and centered.
5	14 inches from rear of stack 4 and 31 inches from right rail.
6	14 inches from rear of stack 4 and 31 inches from left rail.
7	35 inches from rear edge of platform and centered.

Figure 7-18. Honeycomb stacks placed on platform

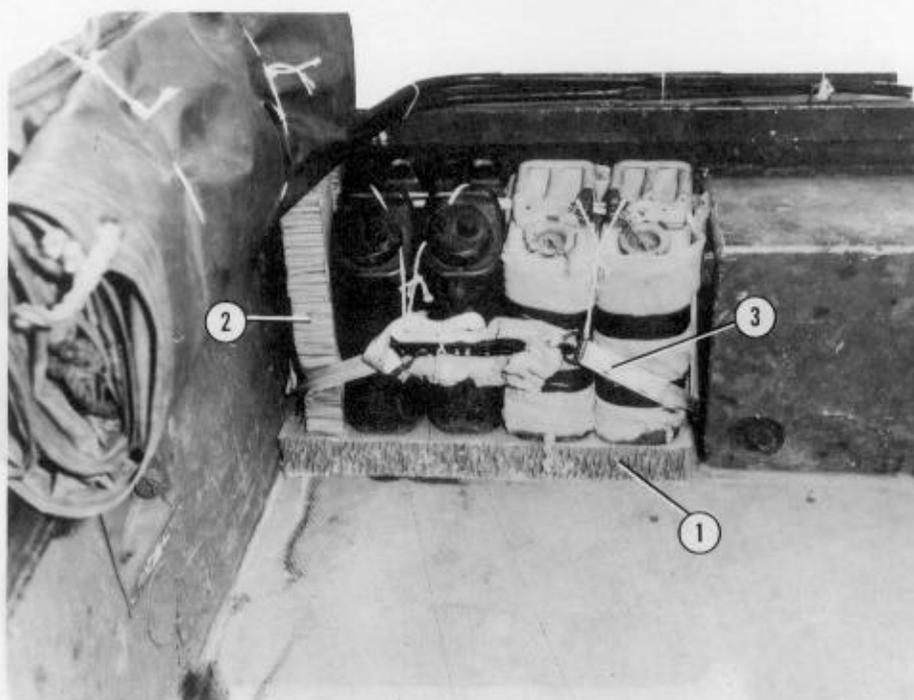
7-21. Preparing Truck

Prepare the truck as described in paragraph 7-4 and as shown in Figures 7-19 and 7-20.



- ① Tie the chain and hook of the winch hook to the frame of the vehicle with type III nylon cord.
- ② Tape the windshield stowage compartment door shut.

Figure 7-19. Winch and windshield storage compartment secured



- ① Place two water cans and two padded gasoline cans on a 16- by 32-inch piece of honeycomb in the right front corner of the carrier bed.
- ② Place a 16- by 20-inch piece of honeycomb between the side of the carrier bed and the water cans.
- ③ Run a 15-foot lashing through the can carrying handles and down through the tiedown provisions in the floor. Fasten the lashing in front of the cans. Pad the load binder with cellulose wadding. Secure the load binder to the can handles with type III nylon cord.

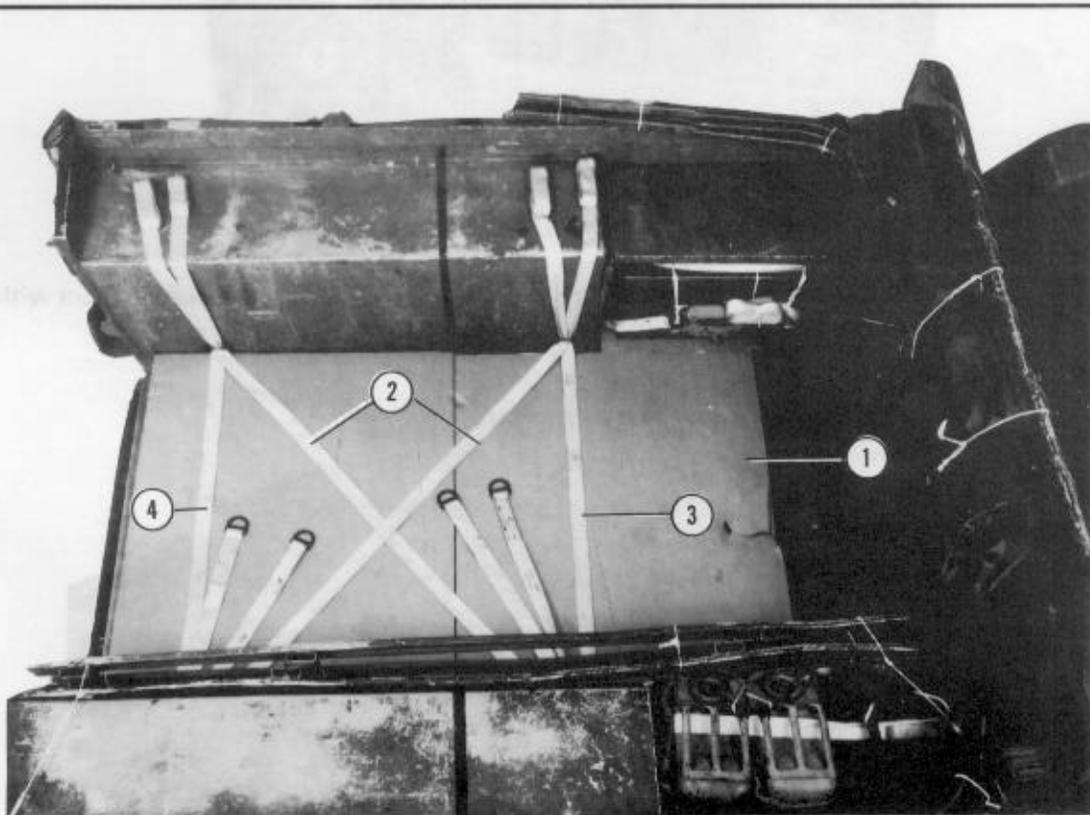
Figure 7-20. Cans secured in cargo bed

7-22. Stowing Accompanying Load

Stow an accompanying load, such as the M102 howitzer equipment, in the carrier body of the truck. Make sure the accompanying load does not extend above the sides of the carrier body and meets the restrictions in FM 10-500/ TO 13C7-1-5. Prepare the carrier for the load as shown in Figure 7-21. Stow and secure the accompanying load as shown in Figures 7-22 and 7-23.

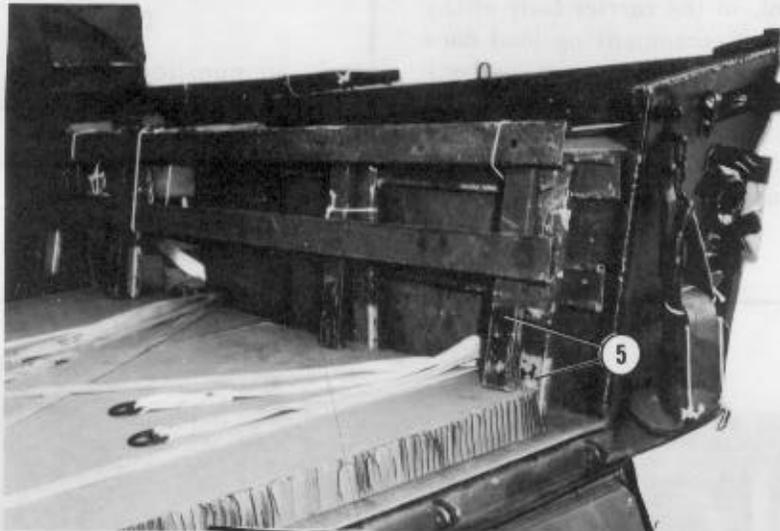
CAUTION

Only ammunition listed in FM 10-553 TO 13C7-18-41 may be airdropped as part of this load.



- ① Place a 48- by 72-inch layer of honeycomb in the carrier bed.
- ② Pass a lashing from the right front carrier tiedown ring over to the left rear tiedown ring. Repeat procedures for the other side.
- ③ Pass a lashing through the forward tiedown rings of the carrier from left to right.
- ④ Pass a lashing through the rear tiedown rings of the carrier from left to right.

Figure 7-21. Cargo carrier prepared for load



- ⑤ Set the seat backs against the right side of the cargo carrier, and secure them with type III nylon cord.



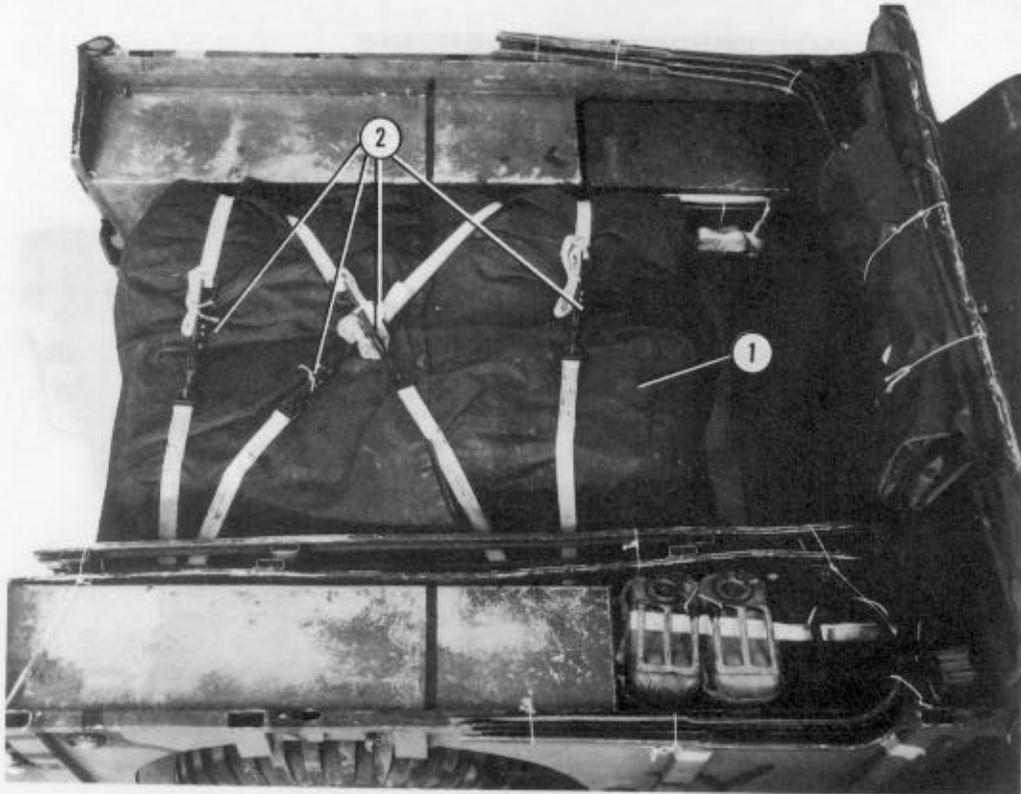
- ⑥ Lay a 7- by 14-foot tarpaulin in the carrier bed.
- ⑦ Place two net pole bags and a spare howitzer wheel on the tarpaulin toward the front of the carrier bed.

Figure 7-21. Cargo carrier prepared for load (continued)



- ① Lay an A-22 sling assembly behind the spare tire.
- ② Place the aviator kit bag containing slings in the carrier bed.
- ③ Place the operator vehicle equipment on top of the A-22 sling assembly (not shown).
- ④ Fill in empty spaces with honeycomb.

Figure 7-22. Accompanying load stowed



- ① Fold the tarpaulin over the load.
- ② Secure the lashings with load binders and D-rings.

Figure 7-23. Accompanying load secured

7-23. Installing Interbody Truss Assembly

Install the interbody truss assembly between the tractor and the carrier according to TM 9-2320-242-10-1 and as shown in Figure 7-7.

7-24. Installing Suspension Slings and Deadman's Tie

Install the suspension slings and the deadman's tie according to FM 10-500/TO 13C7-1-5 and as shown in Figure 7-8.

7-25. Positioning Truck

Position the truck as shown in Figure 7-24.

7-26. Installing Drive-Off Aids

Install the drive-off aids as explained in paragraph 7-9 and as shown in Figure 7-10.

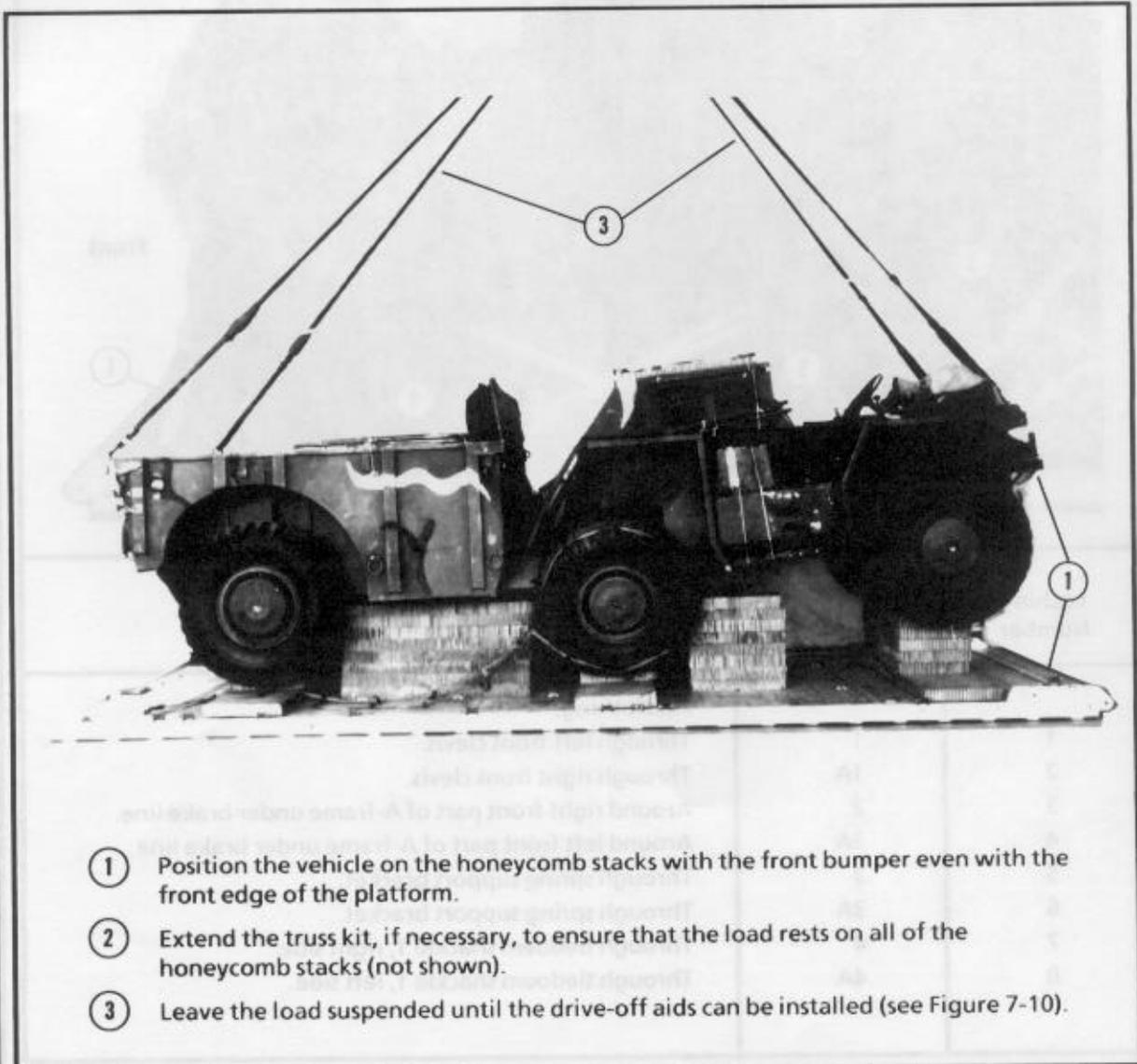
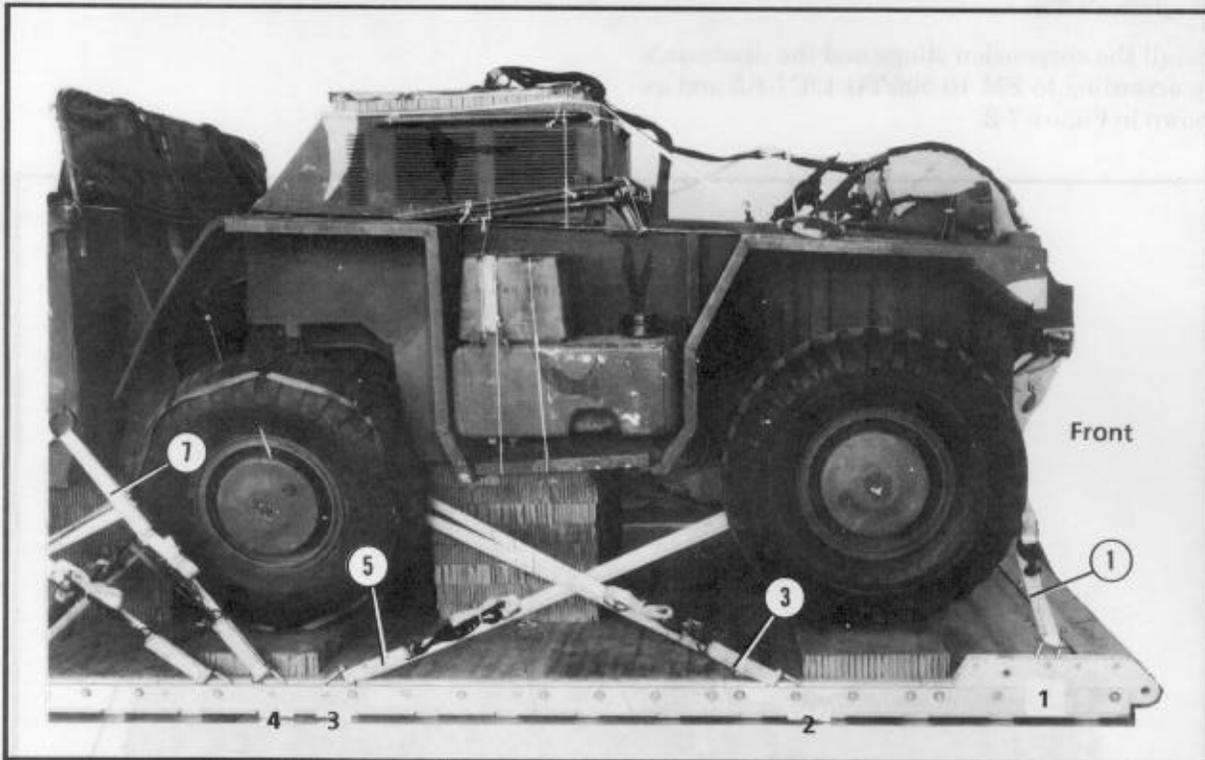


Figure 7-24. Vehicle positioned on platform

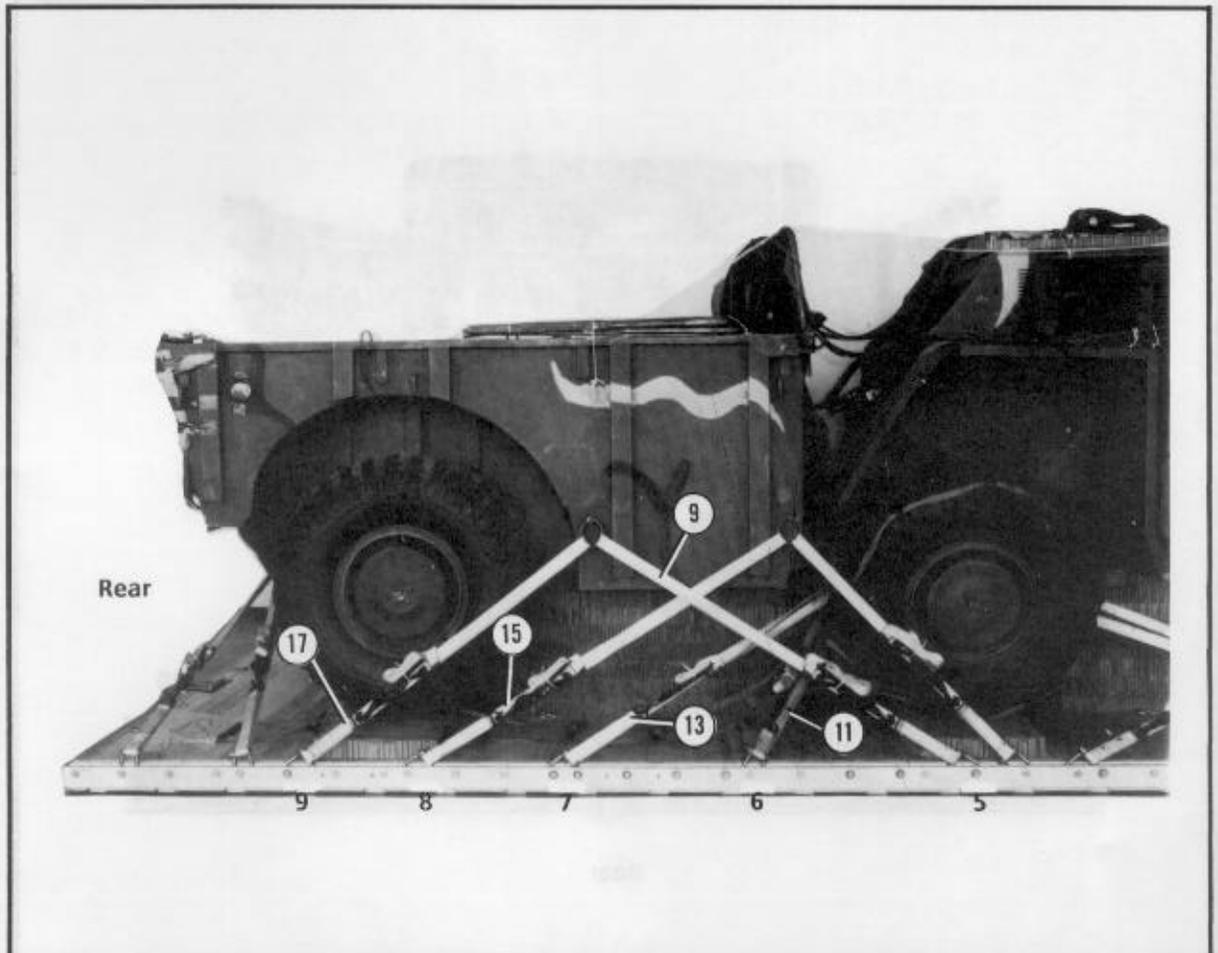
7-27. Lashing Truck

Lash the truck to the platform according to FM 10-500/TO 13C7-1-5 and as shown in Figures 7-25, 7-26, and 7-27.



Lashing Number	Tiedown Clevis Number	Instructions
1	1	Pass lashing: Through left front clevis.
2	1A	Through right front clevis.
3	2	Around right front part of A-frame under brake line.
4	2A	Around left front part of A-frame under brake line.
5	3	Through spring support bracket.
6	3A	Through spring support bracket.
7	4	Through tiedown shackle 1, right side.
8	4A	Through tiedown shackle 1, left side.

Figure 7-25. Lashings 1 through 8 installed



Lashing Number	Tiedown Clevis Number	Instructions
9	5	Pass lashing: Through tiedown shackle 2, right side.
10	5A	Through tiedown shackle 2, left side.
11	6	Around carriage support bracket, right side.
12	6A	Around carriage support bracket, left side.
13	7	Around leaf spring, right side.
14	7A	Around leaf spring, left side.
15	8	Through tiedown shackle 1, right side.
16	8A	Through tiedown shackle 1, left side.
17	9	Through tiedown shackle 2, right side.
18	9A	Through tiedown shackle 2, left side.

Figure 7-26. Lashings 9 through 18 installed

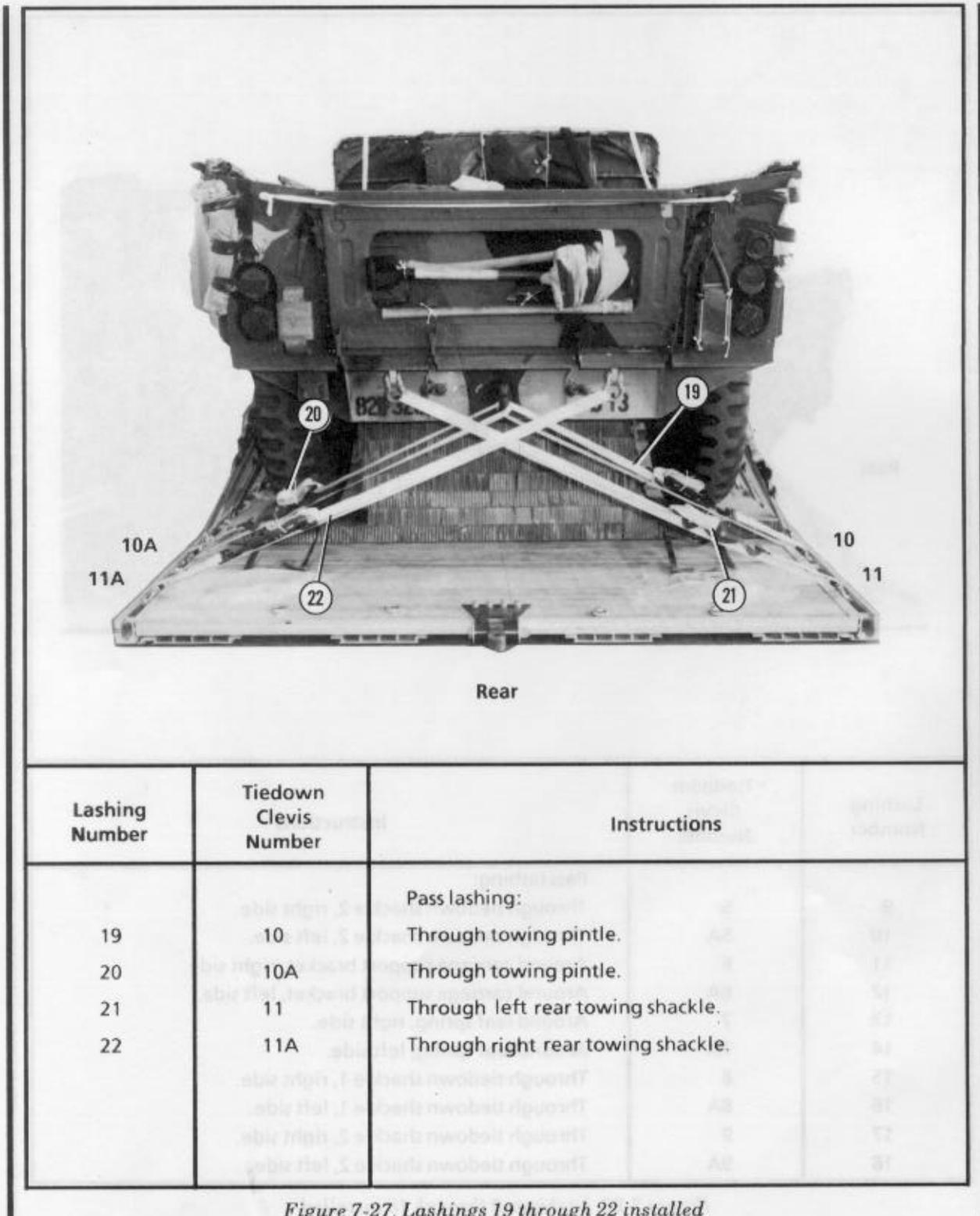
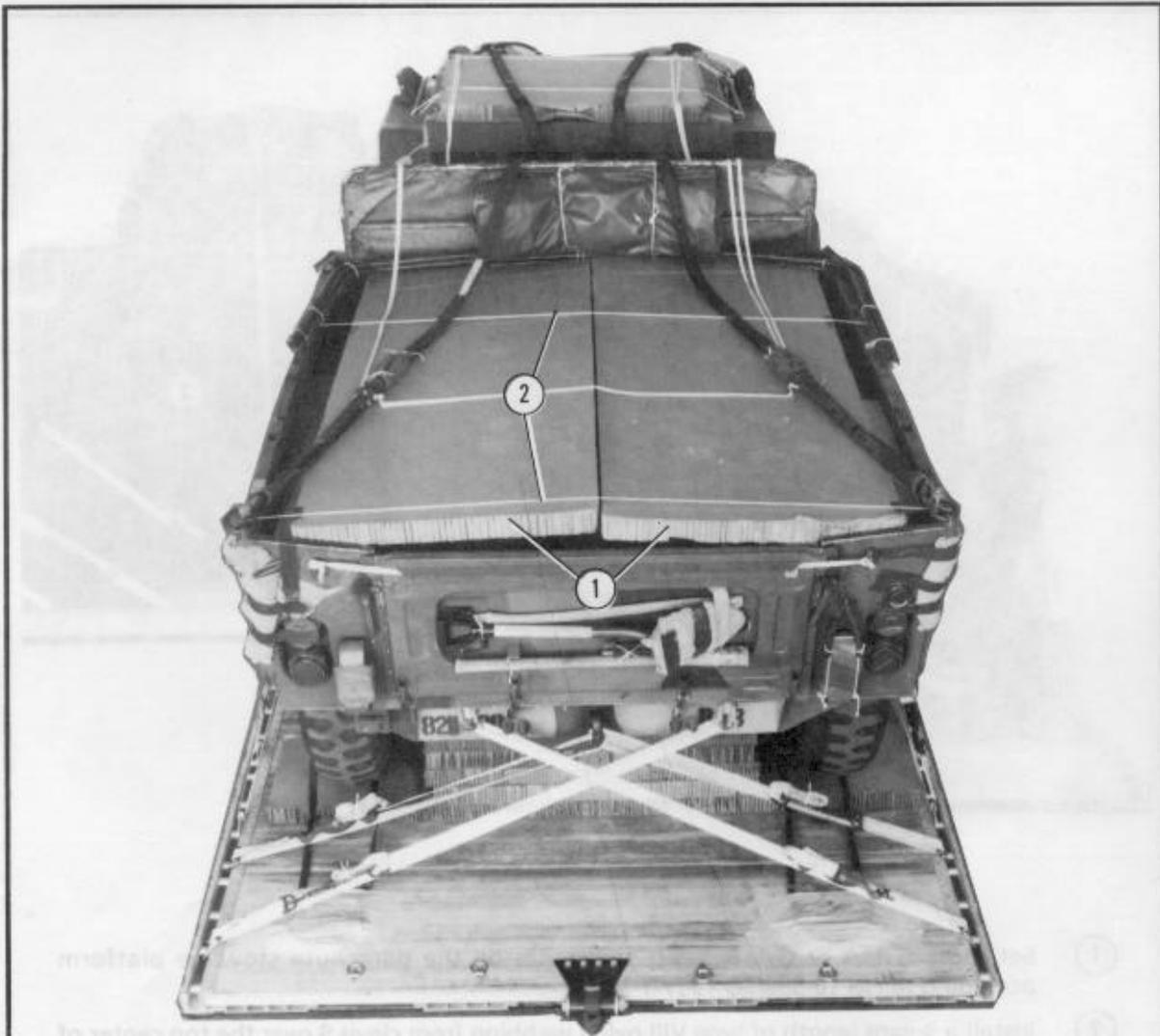


Figure 7-27. Lashings 19 through 22 installed

7-28. Stowing Cargo Parachutes

Stow the cargo parachutes as described below.

a. Building Stowage Platform. Build a parachute stowage platform on top of the load in the carrier bed as shown in Figure 7-28.

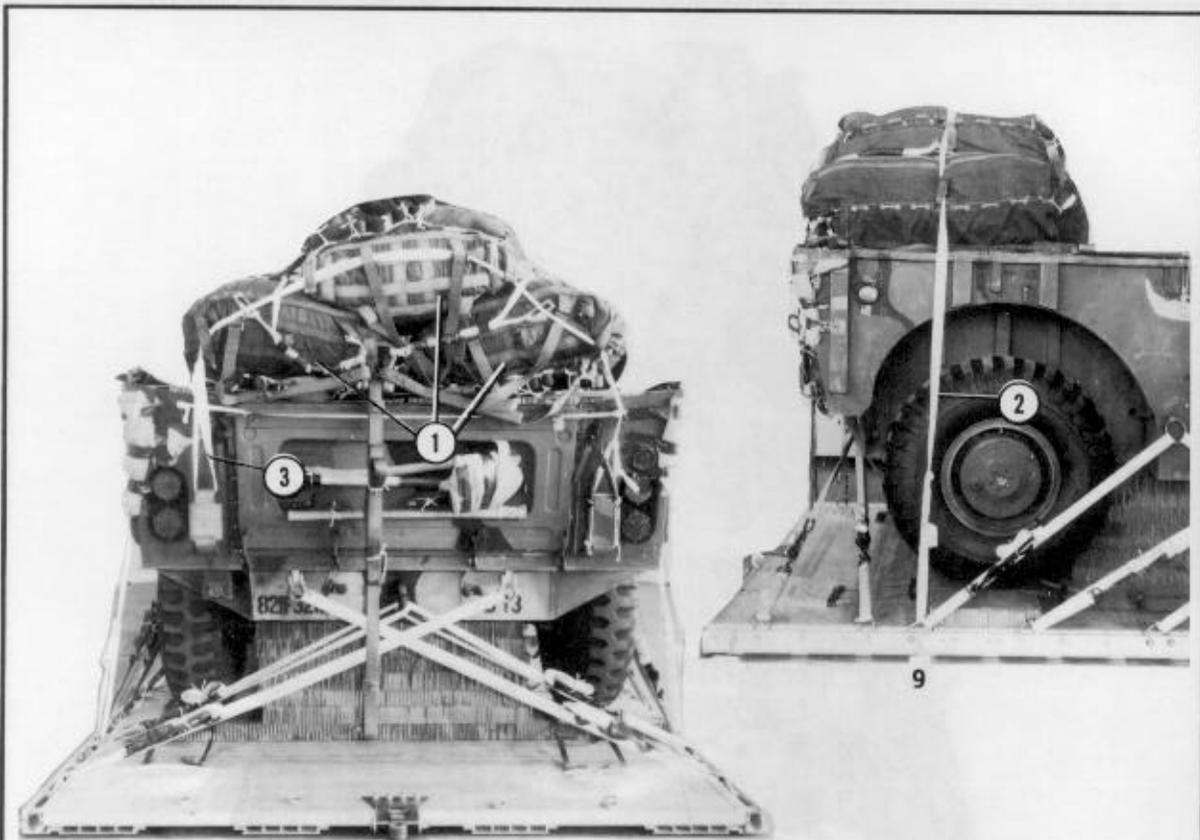


- ① Place two 36- by 84-inch pieces of honeycomb side by side, lengthwise, on top of the load in the carrier bed. Level the load with honeycomb, if necessary.
- ② Secure honeycomb in place to convenient points on the carrier with type III nylon cord.

Figure 7-28. Honeycomb placed and secured

b. Preparing and Stowing Cargo Parachutes. Prepare and stow three G-11A or G-11B cargo parachutes according to FM 10-500/TO 13C7-1-5. If the accompanying load weighs more than 2,040 pounds, use three G-11B or four G-11A cargo parachutes.

c. Installing Parachute Restraint. Use a 9- and a 6-yard length of type VIII nylon webbing, and install a parachute restraint system according to FM 10-500/TO 13C7-1-5 and Figure 7-29.



- ① Set three G-11A or G-11B cargo parachutes on the parachute stowage platform according to FM 10-500/TO 13C7-1-5.
- ② Install a 9-yard length of type VIII nylon webbing from clevis 9 over the top center of the parachutes. Tie the webbing to clevis 9A.
- ③ Install a 6-yard length of type VIII nylon webbing across the rear of the parachutes. Tie the webbing to the bumperettes.

Figure 7-29. Parachutes stowed and restrained

7-29. Installing Extraction System

Install the EFTC on this load. Install the components of the EFTC according to FM 10-500/TO 13C7-1-5 and as shown in Figure 7-13.

7-30. Installing Provisions for Emergency Restraint

Install medium clevises to the multipurpose links as emergency restraint provisions as shown in Figure 7-14.

7-31. Installing Release System

Prepare and install an M-1 cargo parachute release according to FM 10-500/TO 13C7-1-5 and as shown in Figure 7-30.



- ① Run a length of type III nylon cord through the parachute connectors. Tie the ends of the cord to the third tarpaulin hooks from the front end of the carrier.
- ② Run another length of type III nylon cord around the lower spacer. Tie the ends of the cord to the front outside tarpaulin hook.
- ③ Fold the slack in the rear suspension slings, and tie the folds with 80-pound cotton webbing.
- ④ Tie the free end of the arming wire lanyard to the right front carrying handle of the top parachute.

Figure 7-30. Parachute release installed

7-32. Placing Extraction Parachute

Place the extraction parachute as described below.

a. **C-130 Aircraft.** Place a 22-foot cargo extraction parachute on the load for installation in the aircraft. Include an extraction line bag with this load.

b. **C-141 Aircraft.** Place a 22-foot cargo extraction parachute on the load for installation in the aircraft. This parachute needs a 140-foot (3-loop), type XXVI nylon extraction line. Include an extraction line bag with this load.

7-33. Marking Rigged Load

Mark the rigged load according to FM 10-500/TO 13C7-1-5 using the data in Figure 7-31. Complete DD Form 1387-2, and securely attach it to the load. Indicate on the form that the vehicle fuel tank and the batteries have been prepared according to AFR 71-4/TM 38-250.

7-34. Equipment Required

Use the equipment listed in Table 7-2 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: As shown	11,650 pounds
Maximum allowed	12,000 pounds
Height	95 inches
Width	108 inches
Length	263 1/2 inches
Overhang: Front	4 1/2 inches
Rear	19 inches
CB (from front edge of platform)	118 inches

NOTE: If an accompanying load is rigged as part of this load, the weight, number of parachutes, and CB must be recomputed.

Figure 7-31. Truck with winch rigged on type V platform for low-velocity airdrop

Table 7-2. Equipment required for rigging the M561, 1 1/4-ton cargo truck with winch for low-velocity airdrop on the type V platform

National Stock Number	Item	Quantity
8040-00-273-8713	Adhesive, paste, 1-gal	As required
	Clevis, suspension:	
4030-00-360-0304	5/8-in (small)	6
4030-00-678-8562	3/4-in (medium)	4
4030-00-090-5354	1-in (large)	4
4020-00-240-2146	Cord, nylon, type III, 550-lb	As required
1670-00-168-6068	Coupling, extraction force transfer (platform)	1
	Cover:	
1670-00-360-0328	Clevis, large	3
1670-00-360-0329	Link	6
8135-00-664-6958	Cushioning material, packaging, cellulose wadding	As required
1670-00-823-5042	Deployment line, 16-ft (3-loop), type X nylon webbing or	1
1670-01-063-7761	Deployment line, 16-ft (2-loop), type XXVI nylon webbing	1
1670-00-431-8486	Kit, vehicle, drive-off aid	1
	Line, extraction:	
1670-01-062-6313	60-ft (3-loop), type XXVI nylon webbing (for C-130)	1
1670-01-107-7651	140-ft (3-loop), type XXVI nylon webbing (for C-141)	1
1670-00-783-5988	Link assembly, type IV	6
1670-00-753-3928	Pad, energy-dissipating, honeycomb,	
	3- by 36- by 96-in:	14 sheets
	12- by 24-in	(16)
	12- by 48-in	(16)
	16- by 20-in	(1)
	16- by 32-in	(1)
	18- by 24-in	(2)
	18- by 48-in	(19)
	18- by 96-in	(3)
	20- by 72-in	(2)
	36- by 48-in	(3)
	36- by 84-in	(2)
1670-01-183-2678	Panel, sling, extraction line	2
1670-00-269-1107	Parachute, cargo, G-11A or	3
1670-01-016-7841	Parachute, cargo, G-11B	3
1670-00-687-5458	Parachute, cargo extraction, 22-ft	1
	Platform, airdrop, type V, 20-ft:	
	Bracket:	
1670-01-162-2375	Inside EFTA	1
1670-01-162-2374	Outside EFTA	1
1670-01-162-2372	Clevis, load tiedown	22
1670-01-162-2376	Extraction bracket assembly	1
1670-01-162-2381	Multipurpose link	2
1670-01-162-2387	Pad, roller, 20-ft	4

Table 7-2. Equipment required for rigging the M561, 1 1/4-ton cargo truck with winch for low-velocity airdrop on the type V platform (continued)

National Stock Number	Item	Quantity
1670-01-168-8397	Panel, platform: Main	9
1670-01-168-8398	Rear	1
1670-01-162-2368	Rail, platform, side, 20-ft:	2
5306-01-212-1264	Bolt, machine, 1/2-in by 3 13/64-in long	(80)
1670-01-162-2384	Bushing	(80)
5310-00-167-0823	Washer, flat, 7/16-in diam	(80)
1670-01-097-8816	Release, cargo parachute, M-1	1
	Sling, cargo, airdrop:	
	For Riser Extension:	
1670-00-753-3794	20-ft (2-loop), type X nylon webbing or	6
1670-01-062-6301	20-ft (2-loop), type XXVI nylon webbing	6
	For Suspension:	
1670-00-753-3788	3-ft (3-loop), type X nylon webbing or	4
1670-01-062-6301	3-ft (2-loop), type XXVI nylon webbing	4
1670-00-823-5040	11-ft (3-loop), type X nylon webbing or	4
1670-01-063-7760	11-ft (2-loop), type XXVI nylon webbing	4
1670-00-998-0116	Strap, parachute release, w fastener and release knife or	1
1670-00-040-8219	Strap, parachute release, multicut, come w three knives	1
7510-00-266-5016	Tape, adhesive, 2-in	As required
1670-00-937-0271	Tiedown assembly, 15-ft	27
	Webbing:	
8305-00-268-2411	Cotton, 80-lb	As required
8305-00-268-2453	Nylon, tubular, 1/2-in, 1,000-lb, olive drab	As required
8305-00-263-3591	Nylon, type VIII, 3,600-lb	15 yd