

CHAPTER 3

CERTIFIED DUAL-POINT RIGGING PROCEDURES FOR TRAILERS

3-1. INTRODUCTION

This chapter contains rigging procedures for dual-point trailer loads that have been certified for sling load. Each rigging procedure is found in a paragraph that includes a description of the load, materials required for rigging, and steps to complete the procedure. An applicability paragraph is also a part of each paragraph and identifies the

certified loads. The certified dual-point rigging procedures for trailers are in this section. Paragraphs 3-2 through 3-15 give detailed instructions for rigging loads.

NOTE: Reach Pendants may be used on dual point loads. Place a Reach Pendant on each apex fitting. A static discharge person is not required when using a Reach Pendant.

3-2. M101A2 3/4-Ton Trailer

a. Applicability. The following items in Table 3-1 are certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-1. M101A2 3/4-Ton Trailer

NOMENCLATURE	CURB WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M101A2 with Accompanying Load	3,000	10K	3/20	CH-47	100
Command Version 1 Trailer	1,958	10K	3/20	CH-47	100
Command Version 2 Trailer	1,981	10K	3/20	CH-47	100
Len Cable Trailer	2,796	10K	3/20	CH-47	100
NC Support Trailer	2,643	10K	3/20	CH-47	100
Maintenance Trailer #2	1,430	10K	3/20	CH-47	100
Battalion Spares Trailer #1	1,594	10K	3/20	CH-47	100
Battalion Spares Trailer #2	2,206	10K	3/20	CH-47	100
Downsized Direct Support Section Trailer	2,700	10K	3/20	CH-47	100

WARNING

THE M101A2 3/4-TON TRAILER MUST HAVE A GROSS WEIGHT OF 1,575 POUNDS OR MORE. ADD ADDITIONAL WEIGHT OR CARGO TO ANY TRAILER WHICH WEIGHS LESS THAN 1,575 POUNDS. PLACE THE WEIGHT NEAR THE CENTER OF THE TRAILER.

WARNING

MAXIMUM WEIGHT DURING SLING LOAD OPERATIONS FOR ANY VARIANT OF THE M101A2 3/4-TON TRAILER IS 3,000 POUNDS.

b. Materials. The following materials are required to rig this load:

(1) Sling set (10,000-pound capacity) with one additional apex fitting.

(2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.

(3) Cord, nylon, Type III.

(4) Webbing, cotton, 1/4-inch.

(5) Tie down, CGU-1B or dacron lashing and load binder.

c. Personnel. Two persons can prepare and rig this load in 15 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

(a) Fasten the tailgate in the open position with the chains on each side hooked through the keeper.

(b) Remove the front rack and place it in the bed of the trailer. Place the accompanying load on top of the front rack. Secure the accompanying load to the trailer using tie-down straps. Route the straps diagonally across the load from the tailgate hinge to the front lifting shackles.

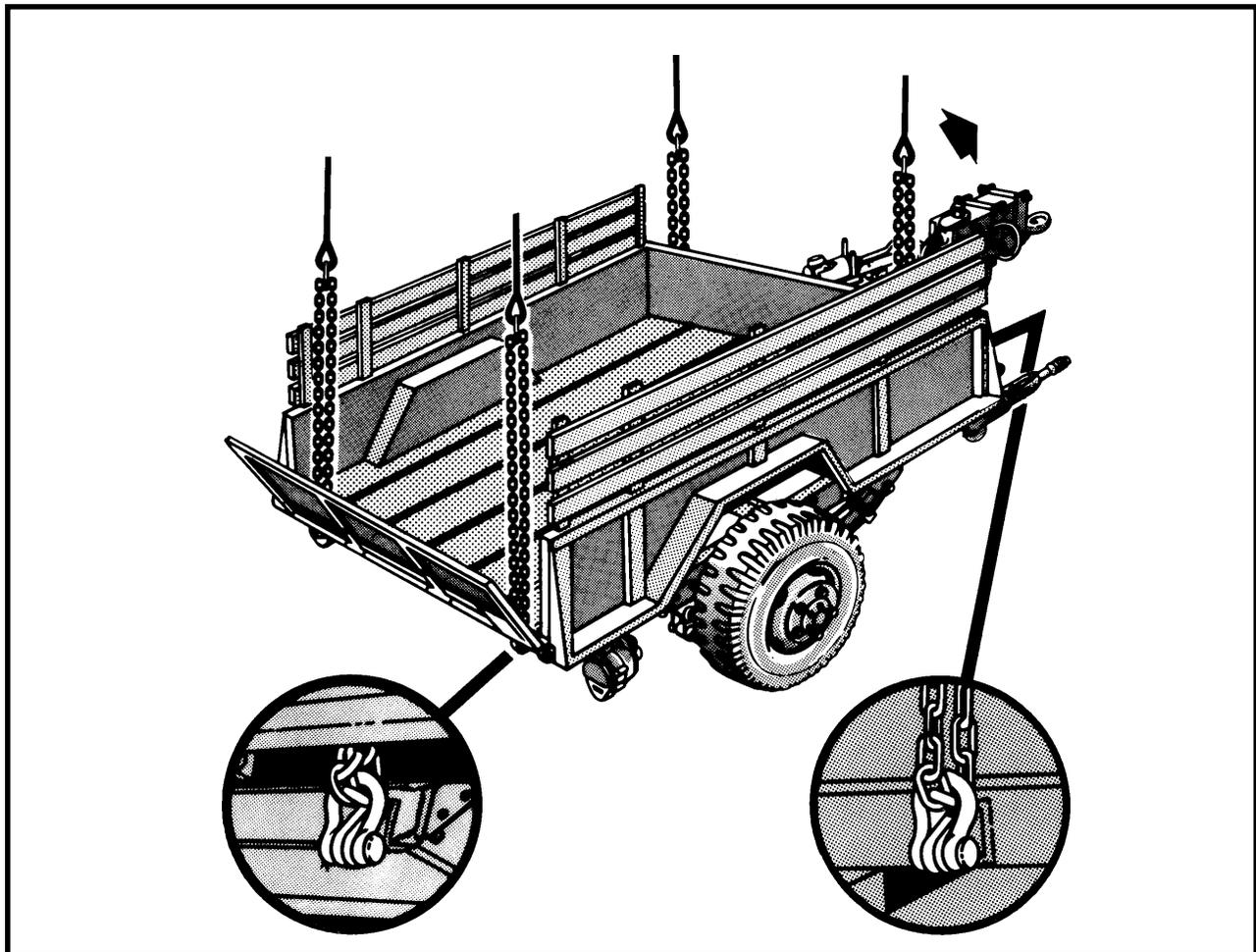
(c) Tape or tie the light cable firmly to the top of the drawbar.

(d) Ensure the parking brake is set.

(2) **Rigging.** Rig the load according to the steps in Figure 3-1.

(3) **Hookup.** The hookup teams stand in the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on the drawbar.
2. Loop the chain end of the sling legs through their respective lift provisions located on the front of the trailer. Place the correct link from Table 3-1 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Route the two sling legs through the opening between the tailgate and the trailer bed. Route each chain on the inboard side of the tailgate hinge.
4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 3-1 in the grab hook. Remove the slack from each rear sling leg and tape or tie (breakaway technique) each sling leg to the side rack.
5. Secure all excess chain with tape or Type III nylon cord.
6. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-1. M101A2 3/4-Ton Trailer

3-3. M1048 Trailer with Tracked Suspension System (TSS)

a. Applicability. The following item in Table 3-2 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-2. M1048 Trailer (TSS)

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M1048 Trailer (TSS)	7,880	10K	16/3	CH-47	140

b. Materials. The following materials are required to rig this load:

- (1) Sling set (10,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III.
- (4) Webbing, cotton, 1/4-inch.

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

- (1) **Preparation.** Prepare the load using the following steps:
 - (a) Secure all loose chains, hoses, and cables to the trailer drawbar with Type III nylon cord.
 - (b) Secure any lids, caps, or loose items with tape or Type III nylon cord.

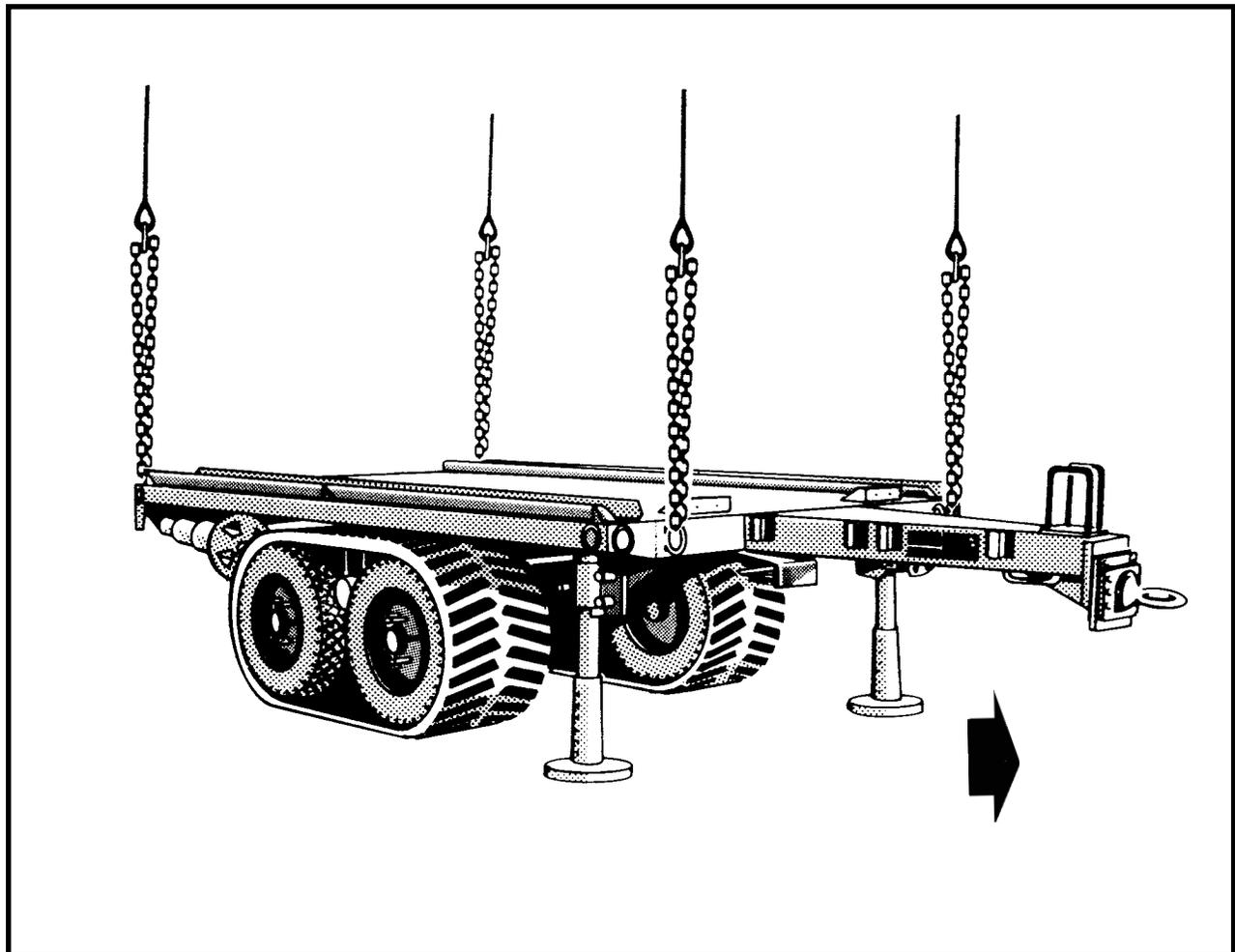
(c) Tape or tie the light cable firmly to the top of the drawbar.

- (d) Place the front leveling jacks in the down position. Ensure the base of the leveling jacks are not extended. Stow the jack handles and secure with Type III nylon cord. Secure the rear leveling jacks in the up position.
- (e) Ensure the parking brake is set.

(2) **Rigging.** Rig the load according to the steps in Figure 3-2.

(3) **Hookup.** The hookup teams stand in the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on the front (lunette end) of the trailer.
2. Loop the chain end of the sling legs through their respective lift provisions located on the front of the trailer. Place the correct link from Table 3-2 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting on the rear of the trailer.
4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 3-2 in the grab hook.
5. Secure all excess chain with tape or Type III nylon cord.
6. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-2. M1048 Trailer (TSS)

3-4. M989 Heavy-Expanded Mobility Ammunition Trailer (HEMAT)

a. Applicability. The following item in Table 3-3 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-3. M989 HEMAT

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M989 HEMAT (Empty)	7,640	10K	40/4	CH-47	130

NOTE: This load is only certified for sling loading at its empty weight.

Place the remaining panels on top of the respective panels on the trailer.

b. Materials. The following materials are required to rig this load:

- (1) Sling set (10,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III.
- (4) Webbing, cotton, 1/4-inch.
- (5) Tie-down CGU-1/B (8 each).

c. Personnel. Two persons can prepare and rig this load in 15 minutes.

d. Procedures. The following procedures apply to this load:

(1) Preparation. Prepare the load using the following steps:

(a) At each corner of the trailer, slide the lifting provisions out until they are completely extended. Do not lift the trailer unless the provisions are fully extended and secured in position.

(b) Remove the side and end panels. Place two panels side by side on the trailer so that the panel ends are approximately 10 inches from the front of the trailer. Make sure the panels are positioned lengthwise on the trailer.

(c) Secure the panels on the trailer with the tie-down straps. Attach the hook end of one tie-down strap to a tie-down ring on the trailer bed beside the panels approximately 1 foot from the end of the panels. Connect and tighten the ratchet end to a tie-down ring on the other side of the panels. Secure loose end of strap. Repeat with a second tie-down strap at the other end of the panels.

(d) To secure the panels lengthwise, route the hook end of one tie-down strap around the vertical metal stiffeners on the top panel of the stack of panels on the left side of the trailer. Attach the hook end to a tie-down ring on the front end of the trailer bed. Connect and tighten the ratchet end to a tie-down ring on the other end of the stack of panels. Secure loose end of strap. Repeat with a second tie-down strap on the other stack of panels.

(e) Tape or tie the intervehicular cable, hoses, and safety chains firmly to the top of the drawbar with tape or Type III nylon cord.

(f) Engage the parking brake.

(2) Rigging. Rig the load according to the steps in Figure 3-3.

(3) Hookup. The hookup teams stand in the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter

removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) Derigging. Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

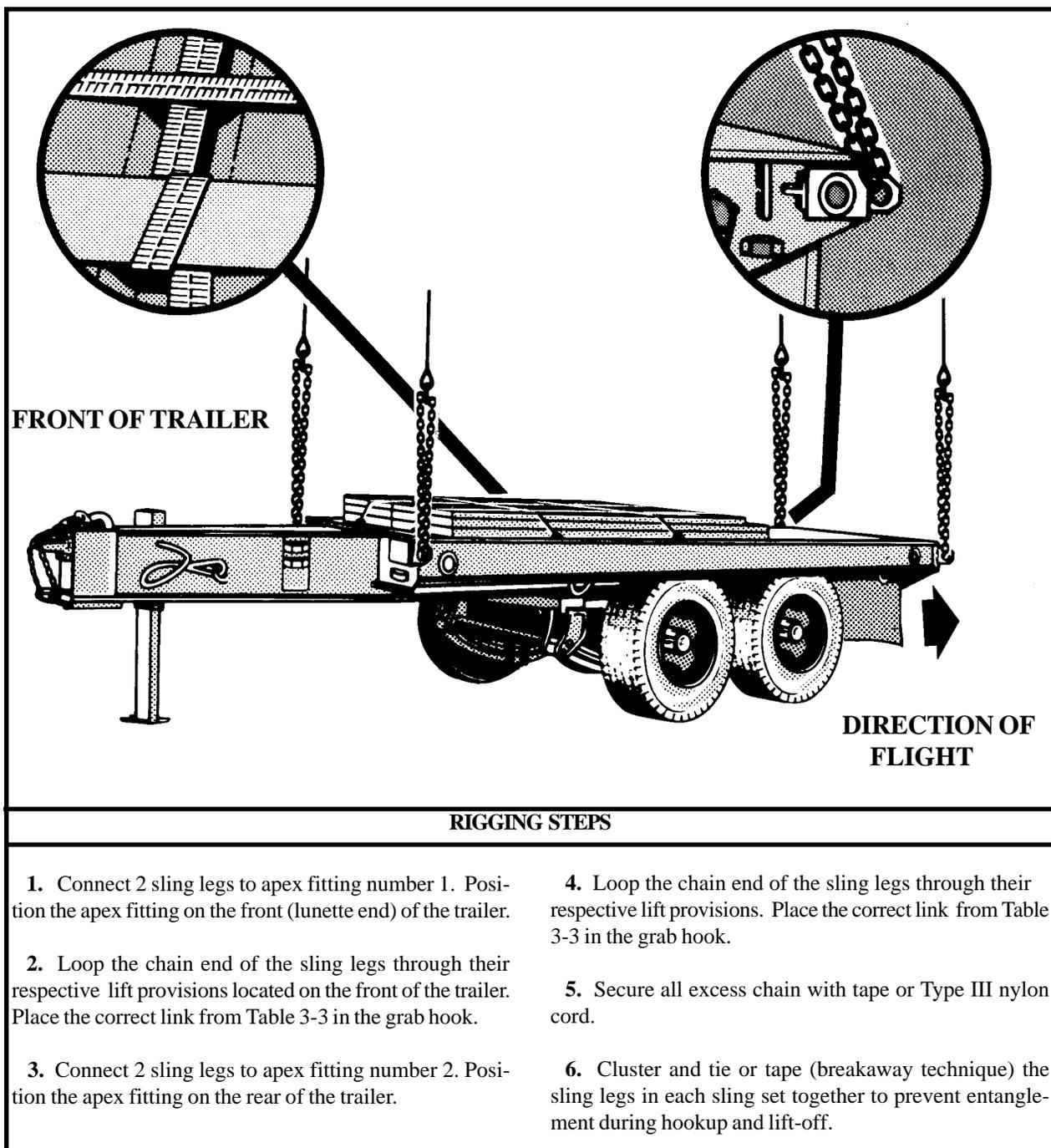


Figure 3-3. M989 HEMAT

3-5. M989A1 Heavy-Expanded Mobility Ammunition Trailer (HEMAT II)

a. Applicability. The following item in Table 3-4 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-4. M989A1 HEMAT II

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M989A1 HEMAT II	10,650	25K	15/3	CH-47	130

CAUTION
The following rigging procedures are for the M989A1 HEMAT II only. Do not use these procedures when rigging the M989 HEMAT.

b. Materials. The following materials are required to rig this load:

- (1) Sling set (25,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Tie-down CGU-1/B (as required).

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

- (a) Inspect the lift provisions at the four upper corners of the cargo bed.

(b) Raise the trailer tongue and secure it in the up position with a CGU-1/B.

(c) Secure the brake hose, safety hose, intravehicular cable(s), and safety chains to the trailer and tongue with tape or Type III nylon cord.

(d) Engage the steering lockout pin.

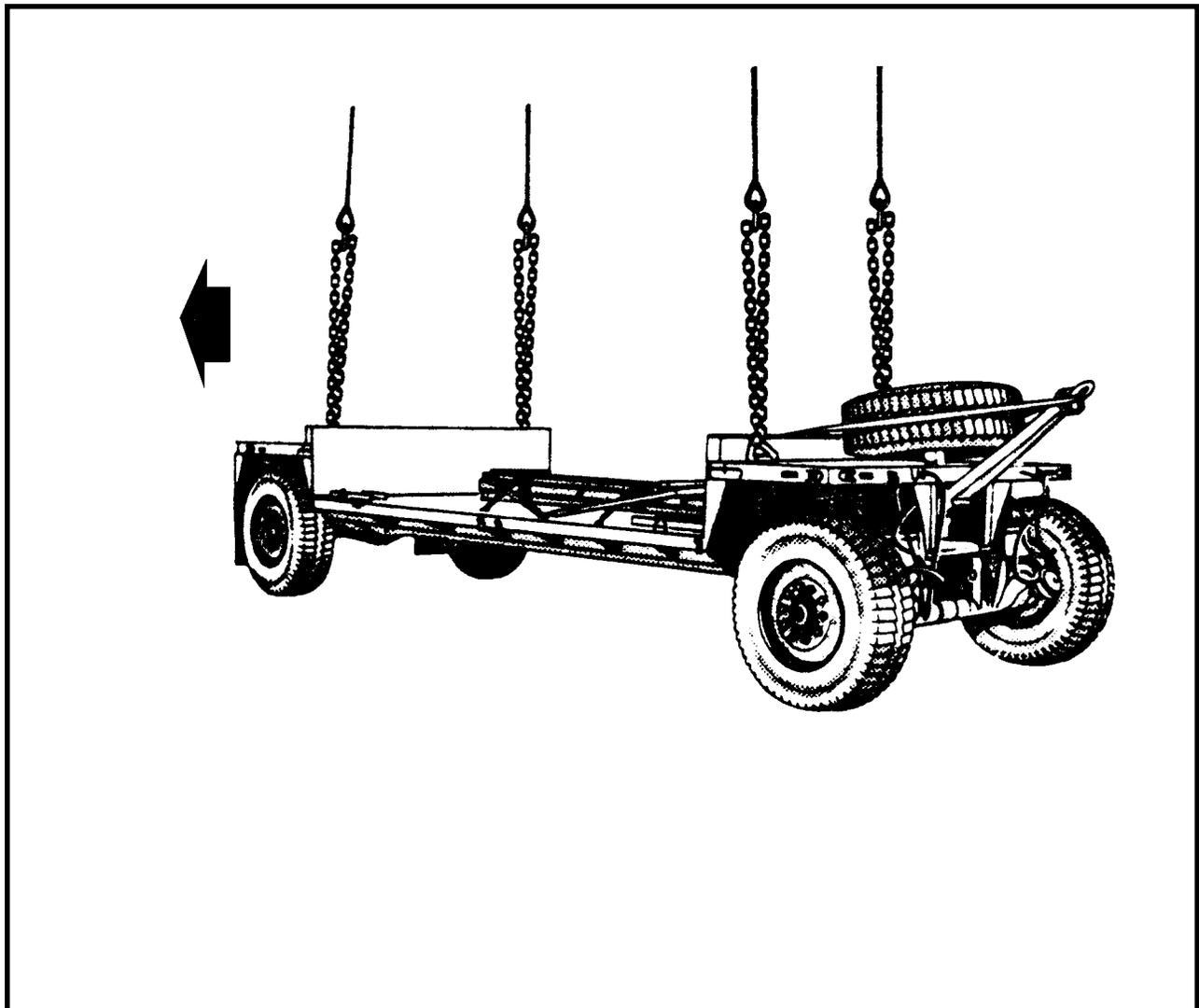
(e) Secure the side panels to the cargo deck with CGU-1Bs.

(2) **Rigging.** Rig the load according to the steps in Figure 3-4.

(3) **Hookup.** The hookup teams stand on top of the M989A1. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

CAUTION
Brief the helicopter crew to relax sling leg tension and hover to the side of the load when releasing the apex fitting to prevent damage to the panels on top of the trailer.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on top of the front deck of the trailer.
2. Loop the chain end of the sling legs through their respective lift provisions located on the front (tongue end) of the trailer. Place the correct link from Table 3-4 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting on the top of the rear deck of the trailer.
4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 3-4 in the grab hook.
5. Secure all excess chain with tape or Type III nylon cord.
6. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-4. M989A1 HEMAT II

3-6. Mk14 Trailer, Container Hauler

a. Applicability. The following item in Table 3-5 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-5. Mk14 Trailer, Container Hauler

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Mk 14 Trailer, Container Hauler	16,000	40K	3/15	CH-53	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (40,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.

c. Personnel. Two persons can prepare and rig this load in 15 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

(a) Disengage the Mk14 from the Mk48 prime mover according to the operator's manual.

(b) Secure all hoses with tape or Type III nylon cord.

(c) Tape all lights, reflectors, and glass fixtures.

(d) Ensure all tool compartment doors are closed and secured.

(e) Remove the safety retainer pins from the lifting eyelets located under the doors in the bed of the trailer. Unscrew the lifting eyelets from their stored position and reinsert the lifting eyelets so that the eyelet portion is accessible from the bed of the trailer through the access doors. Screw the lifting eyelets all the way in and back out one full turn. Reinsert the safety retainer pins to prevent the lifting eyelets from backing out in flight.

(2) **Rigging.** Rig the load according to the steps in Figure 3-5.

(3) **Hookup.** The hookup teams stand on the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

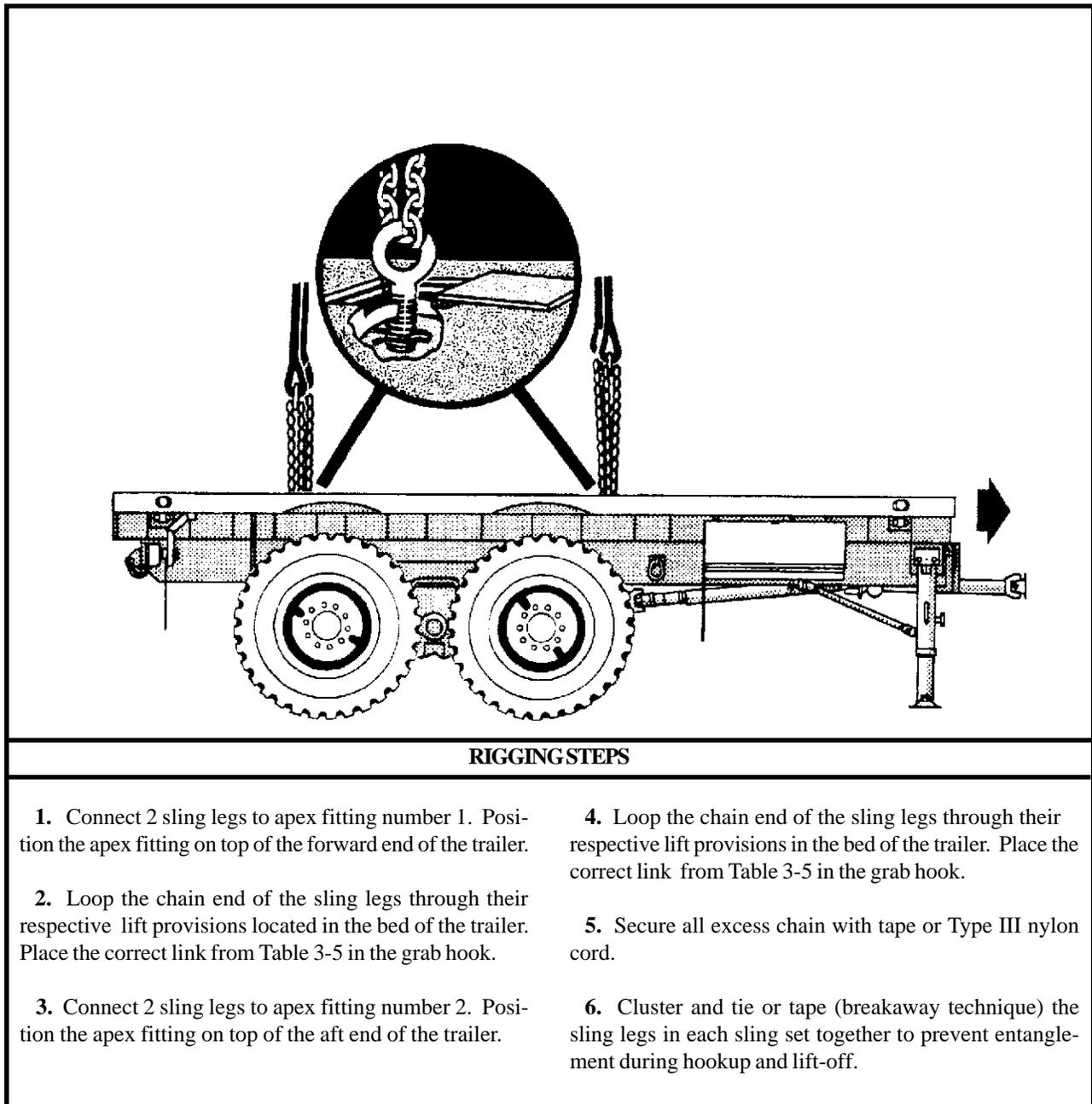


Figure 3-5. Mk14 Trailer, Container Hauler

3-7. Mk15 Trailer, Wrecker/Recovery

a. Applicability. The following item in Table 3-6 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-6. Mk15 Trailer, Wrecker/Recovery

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Mk15 Trailer, Wrecker/Recovery	26,000	40K	3/10	CH-53	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (40,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Tie-down strap, cargo, CGU-1/B, as required.

c. Personnel. Two persons can prepare and rig this load in 30 minutes.

d. Procedures. The following procedures apply to this load:

(1) Preparation. Prepare the load using the following steps:

- (a) Disengage the Mk15 from the Mk48 prime mover according to the operator's manual.
- (b) Remove the A-frame from the rear of the trailer. Stow in the trailer bed and secure with the CGU-1/B tie-down strap.

(c) Secure all hoses with tape or Type III nylon cord.

(d) Tape all lights, reflectors, and glass fixtures.

(e) Ensure all tool compartment doors are closed and secured.

(f) Remove the safety retainer pins from the lifting eyelets located under the doors in the bed of the trailer. Unscrew the lifting eyelets from their stored position and reinsert the lifting eyelets so that the eyelet portion is accessible from the bed of the trailer through the access doors. Screw the lifting eyelets all the way in and back out one full turn. Reinsert the safety retainer pins to prevent the lifting eyelets from backing out in flight.

(2) Rigging. Rig the load according to the steps in Figure 3-6.

(3) Hookup. The hookup teams stand on the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) Derigging. Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

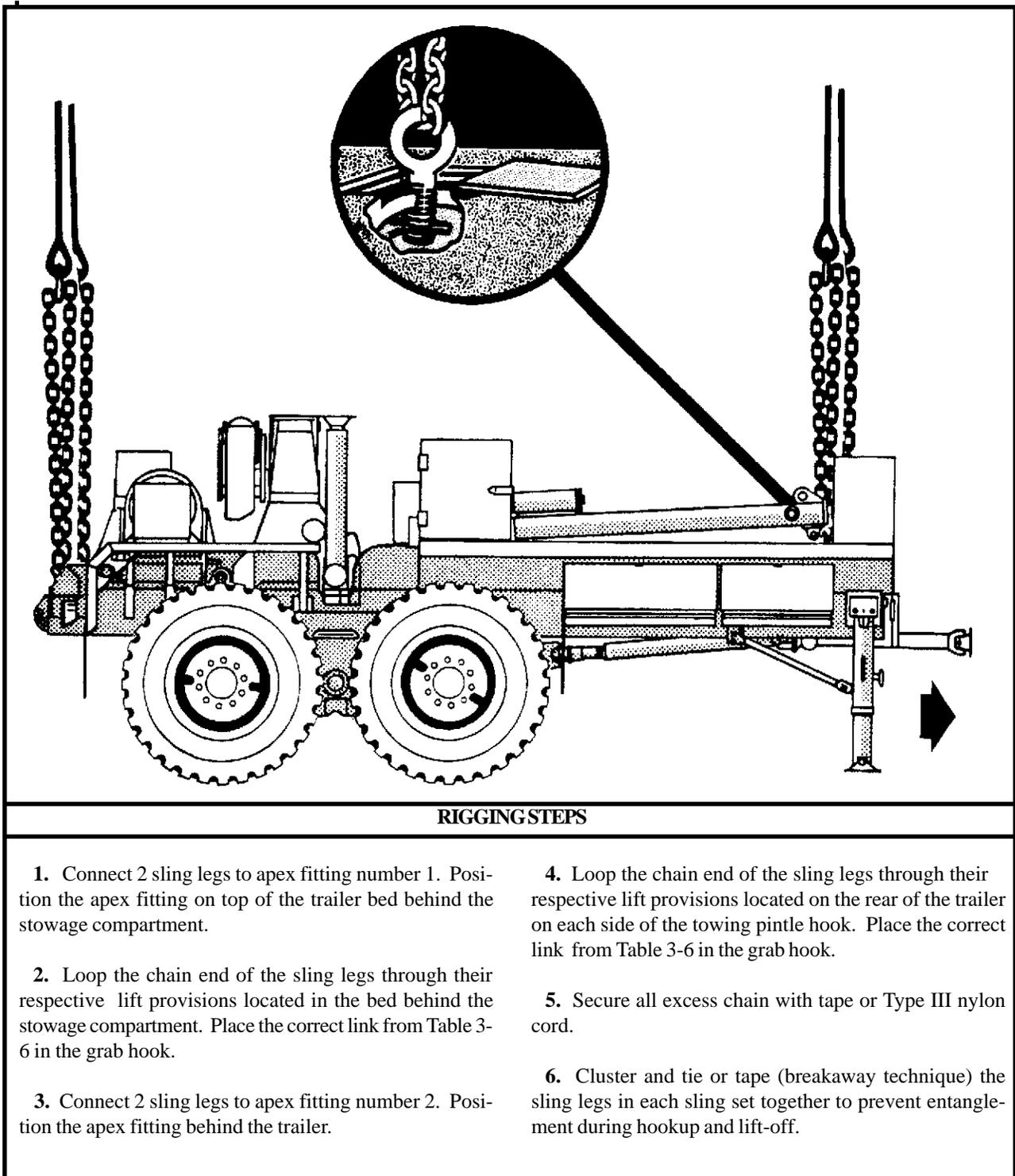


Figure 3-6. Mk15 Trailer, Wrecker/Recovery

3-8. Mk16 Trailer, Fifth-Wheel Adapter

a. Applicability. The following item in Table 3-7 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-7. Mk16 Trailer, Fifth-Wheel Adapter

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Mk 16 Trailer, Fifth -Wheel Adapter	16,000	40K	3/3	CH-53	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (40,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.

c. Personnel. Two persons can prepare and rig this load in 30 minutes.

d. Procedures. The following procedures apply to this load:

- (1) **Preparation.** Prepare the load using the following steps:
 - (a) Disengage the Mk16 from the Mk48 prime mover according to the operator's manual.
 - (b) Secure all hoses with tape or Type III nylon cord.
 - (c) Tape all lights, reflectors, and glass fixtures.

(d) Ensure all tool compartment doors are closed and secured.

(e) Remove the safety retainer pins from the lifting eyelets located under the doors in the bed of the trailer. Unscrew the lifting eyelets from their stored position and reinsert the lifting eyelets so that the eyelet portion is accessible from the bed of the trailer through the access doors. Screw the lifting eyelets all the way in and back out one full turn. Reinsert the safety retainer pins to prevent the lifting eyelets from backing out in flight.

(2) **Rigging.** Rig the load according to the steps in Figure 3-7.

(3) **Hookup.** The hookup teams stand on the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

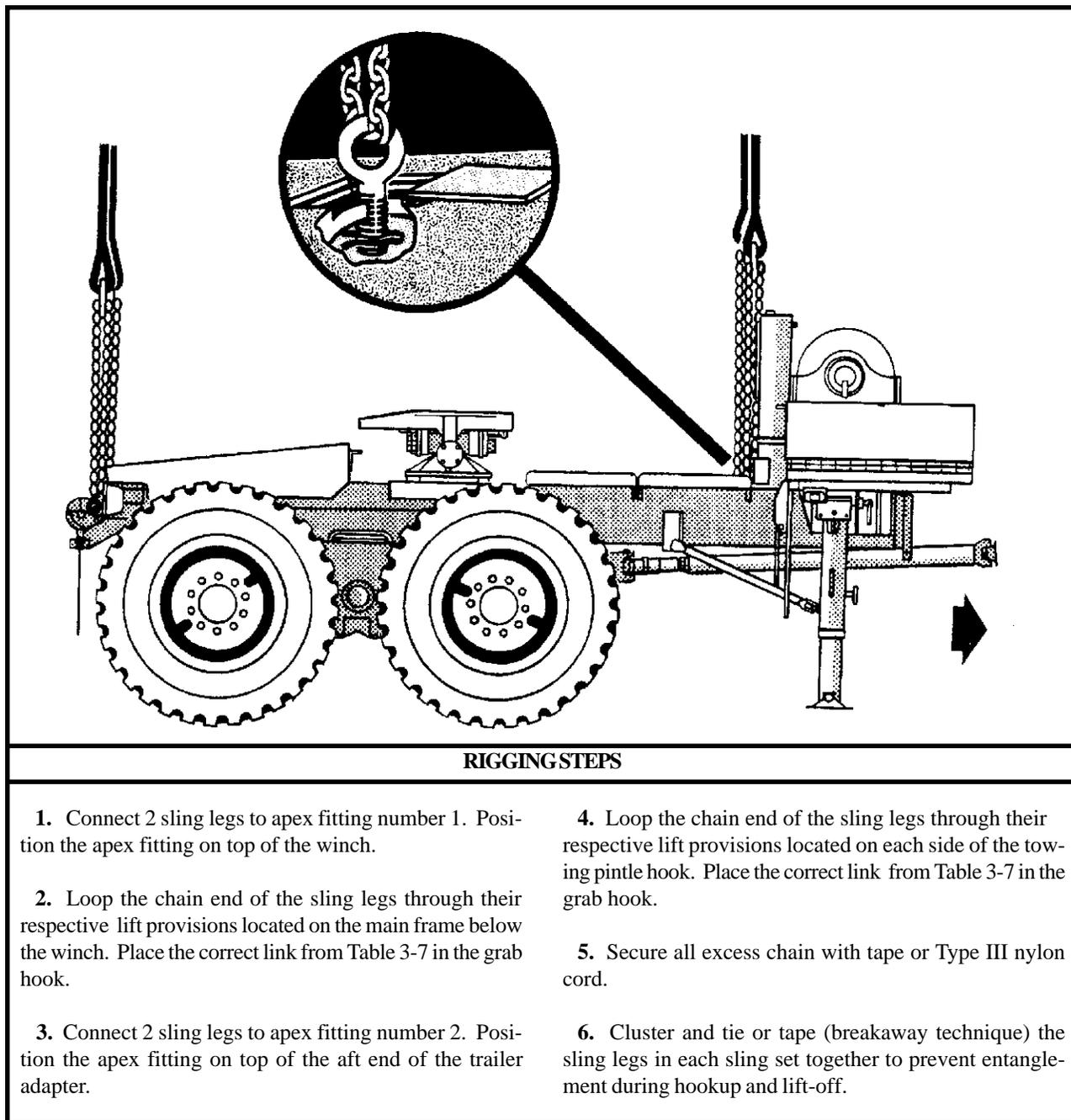


Figure 3-7. Mk16 Trailer, Fifth-Wheel Adapter

3-9. Mk17 Trailer, Drop Side, Cargo

a. Applicability. The following item in Table 3-8 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-8. Mk17 Trailer, Drop Side, Cargo

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Mk17 Trailer, Drop Side , Cargo	23,000	40K	4/16	CH-53	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (40,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.

c. Personnel. Two persons can prepare and rig this load in 20 minutes.

d. Procedures. The following procedures apply to this load:

- (1) **Preparation.** Prepare the load using the following steps:
 - (a) Disengage the Mk17 from the Mk48 prime mover according to the operator's manual.
 - (b) Secure all hoses with tape or Type III nylon cord.
 - (c) Tape all lights, reflectors, and glass fixtures.

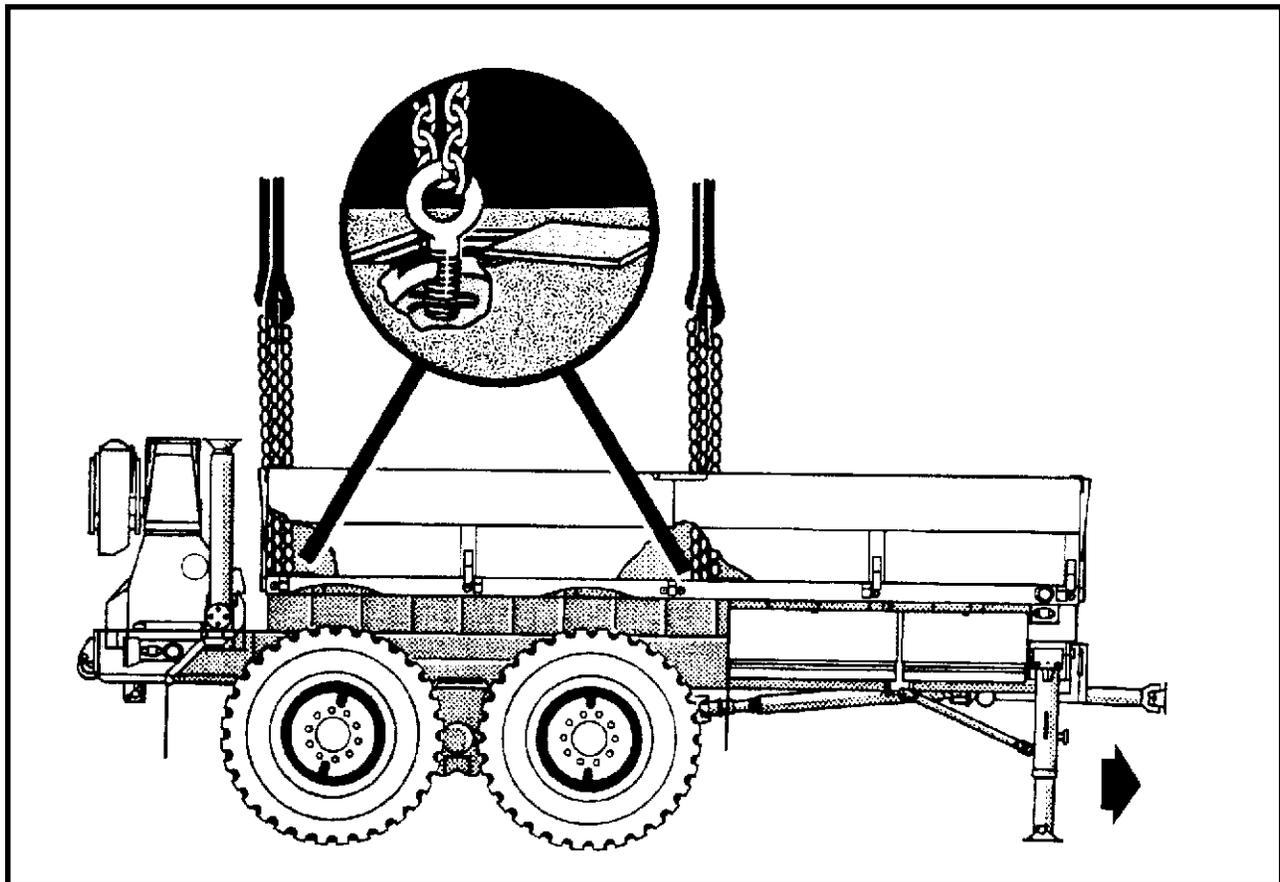
(d) Ensure all tool compartment doors are closed and secured.

(e) Remove the safety retainer pins from the lifting eyelets located under the doors in the bed of the trailer. Unscrew the lifting eyelets from their stored position and reinsert the lifting eyelets so that the eyelet portion is accessible from the bed of the trailer through the access doors. Screw the lifting eyelets all the way in and back out one full turn. Reinsert the safety retainer pins to prevent the lifting eyelets from backing out in flight.

(2) **Rigging.** Rig the load according to the steps in Figure 3-8.

(3) **Hookup.** The hookup teams stand on the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on top of the front of the trailer.
2. Loop the chain end of the sling legs through their respective lift provisions located in the trailer bed. Place the correct link from Table 3-8 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting on top of the aft end of the trailer.
4. Loop the chain end of the sling legs through their respective lift provisions located on the aft end of the trailer just forward of the crane. Place the correct link from Table 3-8 in the grab hook.
5. Secure all excess chain with tape or Type III nylon cord.
6. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-8. Mk17 Trailer, Drop Side, Cargo

3-10. M871A1 Semitrailer

a. Applicability. The following item in Table 3-9 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 3-9. M871A1 Semitrailer

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M871A1 Semitrailer (empty)	12,240	25K	30/3	CH-47	80

NOTE: This trailer must be empty to sling load.

b. Materials. The following materials are required to rig this load:

- (1) Sling set (25,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Tie-down strap, cargo, CGU-1/B, as required.

c. Personnel. Two persons can prepare and rig this load in 20 minutes.

d. Procedures. The following procedures apply to this load:

- (1) **Preparation.** Prepare the load using the following steps:
 - (a) Level the trailer by adjusting the landing gear.
 - (b) Remove the sideboards and tailgate panels. Secure the sideboards and tailgate panels in the front of trailer using CGU-1/B tie-down straps.

(c) Secure the compartment doors with tape or Type III nylon cord.

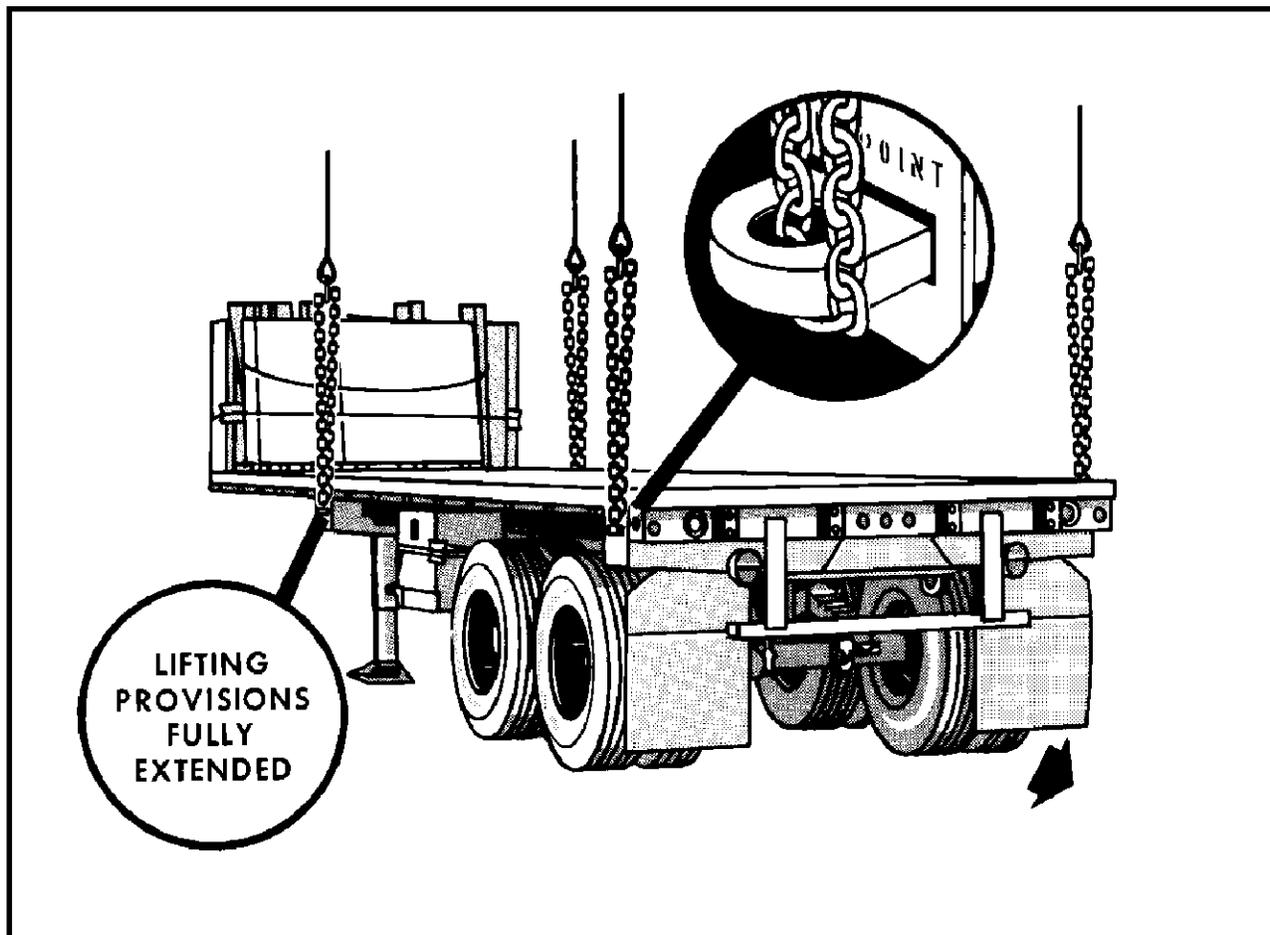
(d) Secure the spare tire in the compartment with Type III nylon cord.

(e) At each lifting provision location, pull down on the latch and push out on the bolt at the inboard end of each lifting eye. Slide the lifting eye out from the housing as far as it will go. Do not lift the semitrailer unless each lifting eye is fully extended.

(2) **Rigging.** Rig the load according to the steps in Figure 3-9.

(3) **Hookup.** The hookup teams stand on the bed of the trailer. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on top of the kingpin end of the trailer.
2. Loop the chain end of the sling legs through their respective lift provisions located outboard from the landing gear. Place the correct link from Table 3-9 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting on top of the wheel end of the trailer.
4. Loop the chain end of the sling legs through their respective lift provisions located aft of the rear wheels. Place the correct link from Table 3-9 in the grab hook.
5. Secure all excess chain with tape or Type III nylon cord.
6. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-9. M871A1 Semitrailer

3-11. High Mobility Trailers (HMT), M1101/M1102

a. Applicability. The following items in Table 3-10 are certified for the helicopter(s) listed in the following table by the Soldier Systems Center:

Table 3-10. High Mobility Trailers

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
High Mobility Trailer (light), M1101	3,400	10K	20/3	CH-47	120
High Mobility Trailer (heavy), M1102	4,200	10K	20/3	CH-47	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (10,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Felt sheet, cattle hair, Type IV, 1/2-inch or suitable substitute.
- (6) Tie-down strap, cargo, CGU-1/B, as required.

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

(1) Preparation. Prepare the load using the following steps:

- (a) Remove the two stabilizer legs from their storage location on the front of the trailer. Place the lower support section in the fully retracted position. Install the stabilizer legs on the rear of the trailer.

(b) Install the front jack and lower the lunette as close to the ground as possible.

(c) Remove the canvas cover and racks from the trailer. Place these items in the bed of the trailer. Place the accompanying load on top of the canvas cover and secure it with the tie-down straps.

(d) Secure the light cable to the top of the drawbar with tape or Type III nylon cord.

(e) Engage the parking brake.

(2) Rigging. Rig the load according to the steps in Figure 3-10.

(3) Hookup. The hookup teams stand in the bed of the trailer and on the drawbar. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) Derigging. Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

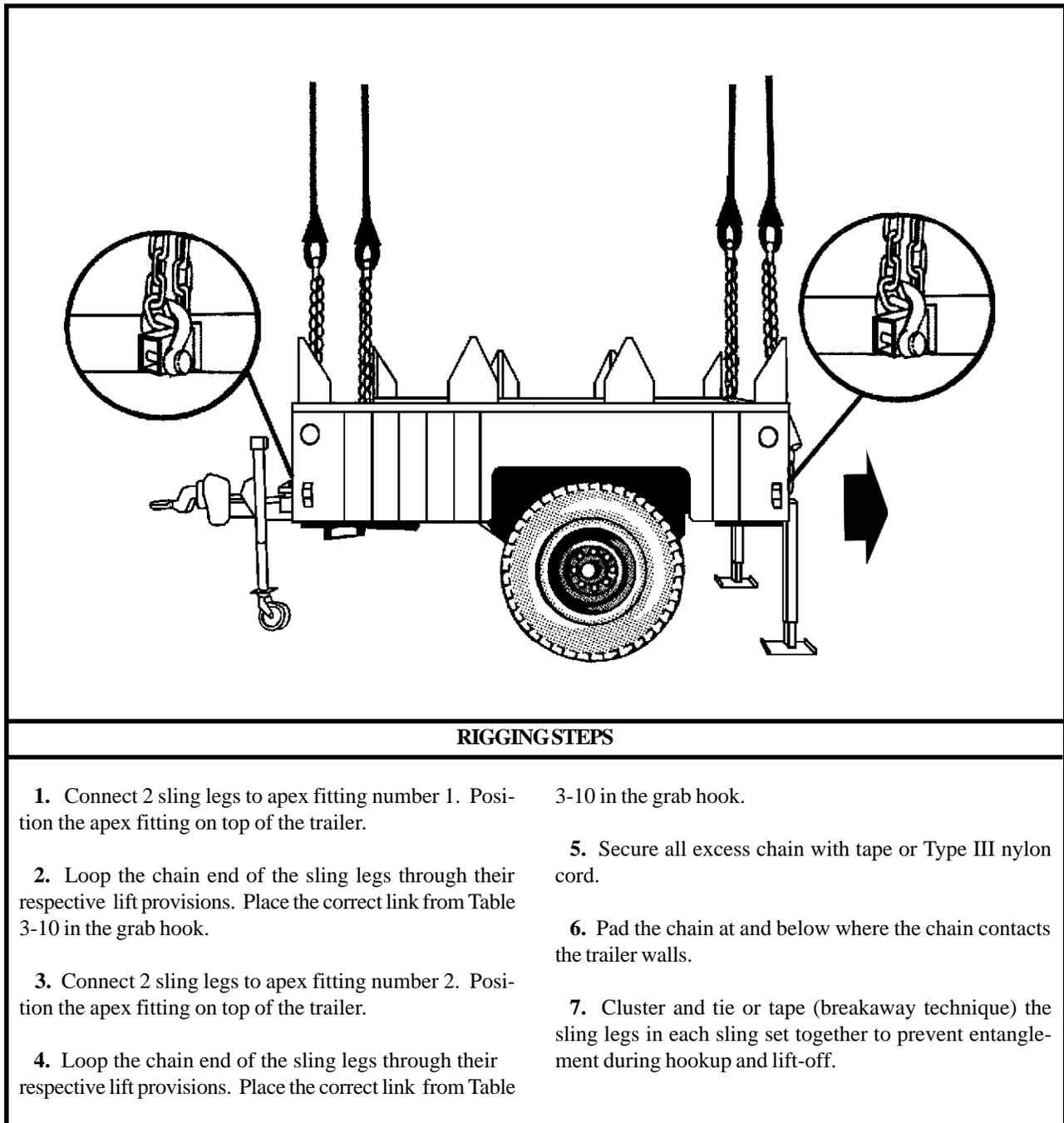


Figure 3-10. High Mobility Trailers

3-12. High Mobility Trailers (HMT) with Generator for Joint Surveillance Target Attack Radar (JSTAR) System

a. Applicability. The following items in Table 3-11 are certified for the helicopter(s) listed in the following table by the Soldier Systems Center:

Table 3-11. High Mobility Trailers with Generator (JSTAR)

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Mission Trailer, W/O Transit Cases	3,960	10K	10/3	CH-47	90
Support Trailer, W/O Transit Cases	3,878	10K	10/3	CH-47	90

b. Materials. The following materials are required to rig this load:

(1) Sling set (10,000-pound capacity) with one additional apex fitting.

(2) Chain length, part number 38850-00053-101, from a 10,000-pound capacity sling set (4 each).

(3) Coupling link, part number 577-0615, from a 10,000-pound capacity sling set (4 each).

(4) Tape, adhesive, pressure-sensitive, 2-inch wide roll.

(5) Cord, nylon, Type III, 550-pound breaking strength.

(6) Webbing, cotton, 1/4-inch, 80-pound breaking strength.

(7) Felt sheet, cattle hair, Type IV, 1/2-inch or suitable substitute.

c. Personnel. Two persons can prepare and rig this load in 15 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

(a) Engage the parking brake.

(b) Secure safety chains and brake hoses to the top of the drawbar with Type III nylon cord.

(c) Secure all lids, doors, and caps with tape or Type III nylon cord.

(d) Remove transit cases which will interfere with the sling legs and store them in the shelter.

(e) Install the rear stabilizer legs with the lower support section fully retracted.

(f) Remove the lunette jack and secure in the trailer bed.

(g) Secure the four lift rings on the trailer in the up position to a convenient point on the load with 1/4-inch cotton webbing.

(h) Connect one additional chain length to each chain of the sling set with the coupling link.

(2) **Rigging.** Rig the load according to the steps in Figure 3-11.

(3) **Hookup.** The hookup teams stand in the bed of the trailer and on the drawbar. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs.

When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

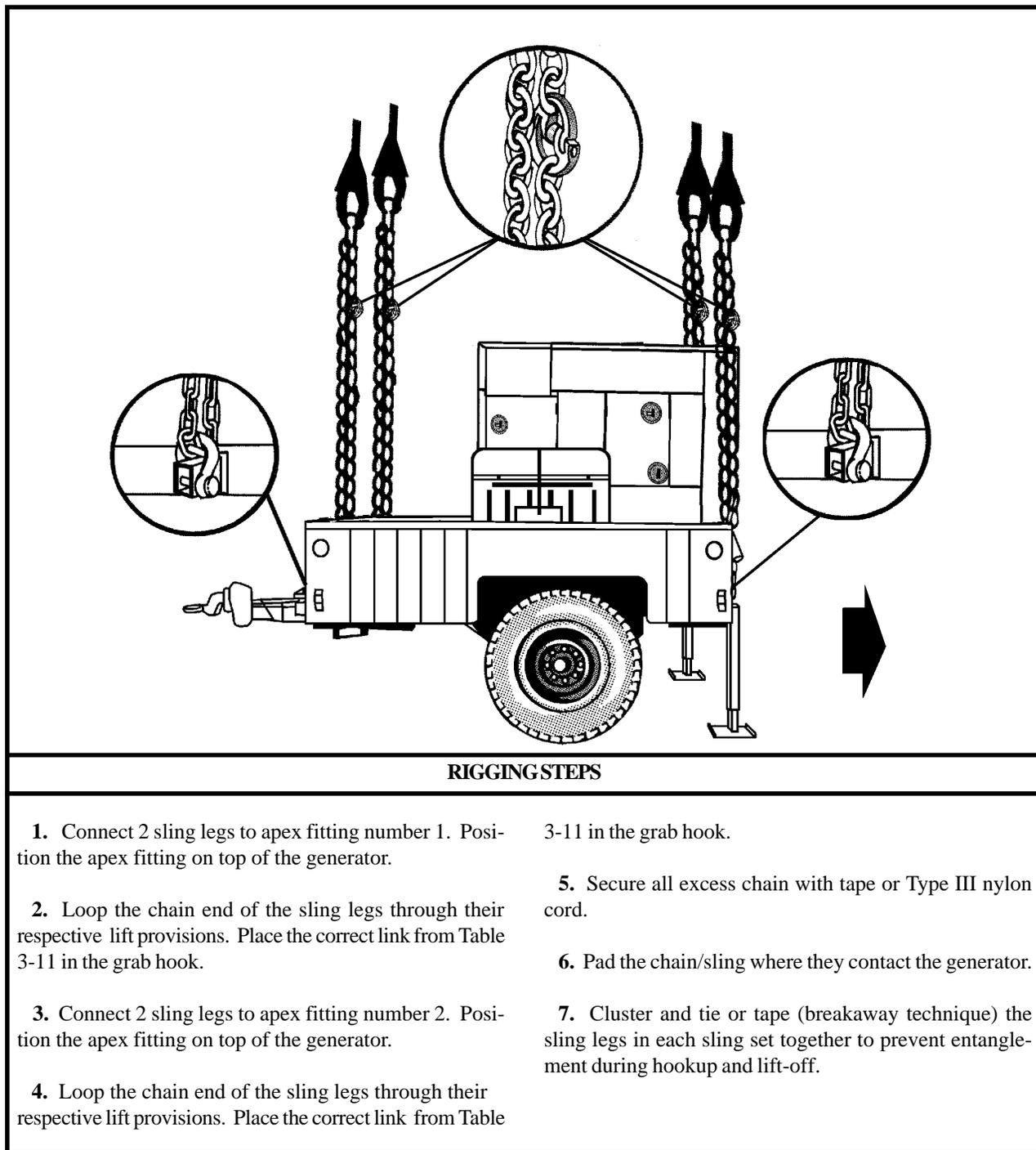


Figure 3-11. High Mobility Trailers with Generator (JSTAR)

3-13. High Mobility Trailer-Light (HMT), M1101 with AN/TSQ-198, Tactical Terminal Control System (TTCS)

a. Applicability. The following item in Table 3-12 is certified for the helicopter(s) listed in the following table by the US Soldier Systems Center:

Table 3-12. High Mobility Trailer-Light (HMT), M1101 with AN/TSQ-198

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
AN/TSQ-198, Tactical Terminal Control System	2,720	10K	20/3	CH-47	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (10,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Felt sheet, cattle hair, Type IV, 1/2-inch or suitable substitute.
- (6) Strap, cargo, tie-down, CGU-1/B (as required).

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

(1) Preparation. Prepare the load using the following steps:

- (a) Engage the parking brake.
- (b) Secure safety chains and brake hoses to the top of the drawbar with Type III nylon cord.

(c) Secure all lids, doors, and caps with tape or Type III nylon cord.

(d) Place additional cargo on the trailer bed and secure the cargo with CGU-1/B tiedown straps.

(e) Install the rear stabilizer legs with the lower support section fully retracted.

(f) Lower the front jack so the lunette is close to the ground.

(g) Secure the four lift rings on the trailer in the up position to a convenient point on the load with 1/4-inch cotton webbing.

(2) Rigging. Rig the load according to the steps in Figure 3-12.

(3) Hookup. The hookup teams stand in the bed of the trailer and on the drawbar. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) Derigging. Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

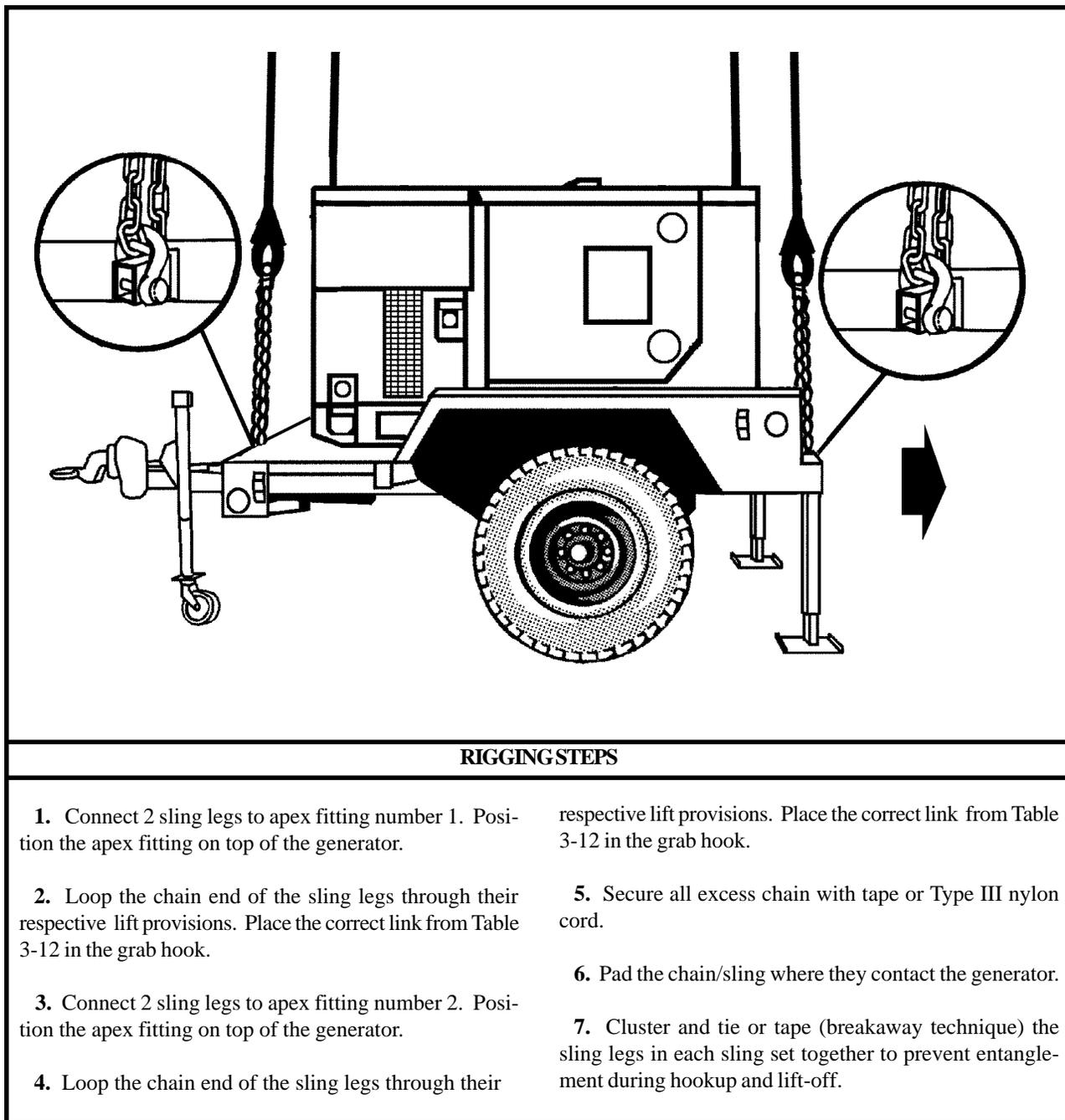


Figure 3-12. High Mobility Trailer-Light (HMT), M1101 with AN/TSQ-198

3-14. Special Operations Media Systems (SOMS B) on Commander's Crash-Out-Package System (COPS) Trailer

a. Applicability. The following items in Table 3-13 are certified for the helicopter(s) listed in the following table by the Soldier Systems Center:

Table 3-13. Special Operations Media Systems on COPS Trailer

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Environmental Control Unit (ECU) on COPS Trailer	4,080	10K	5/35	CH-47	120
NON-ECU on COPS Trailer	3,145	10K	5/35	CH-47	120

b. Materials. The following materials are required to rig this load:

- (1) Sling set (10,000-pound capacity) with one additional apex fitting.
- (2) Tape, adhesive, pressure-sensitive, 2-inch wide roll.
- (3) Cord, nylon, Type III, 550-pound breaking strength.
- (4) Webbing, cotton, 1/4-inch, 80-pound breaking strength.
- (5) Felt sheet, cattle hair, Type IV, 1/2-inch or suitable substitute.
- (6) Strap, cargo, tie-down, CGU-1/B (as required).

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

- (a) Engage the parking brake.
- (b) Secure light cables, safety chains, and brake hoses

to the top of the drawbar with tape or Type III nylon cord.

(c) Secure all lids, doors, and caps with tape or Type III nylon cord.

(d) Place additional cargo on the trailer bed and secure the cargo with CGU-1/B tiedown straps.

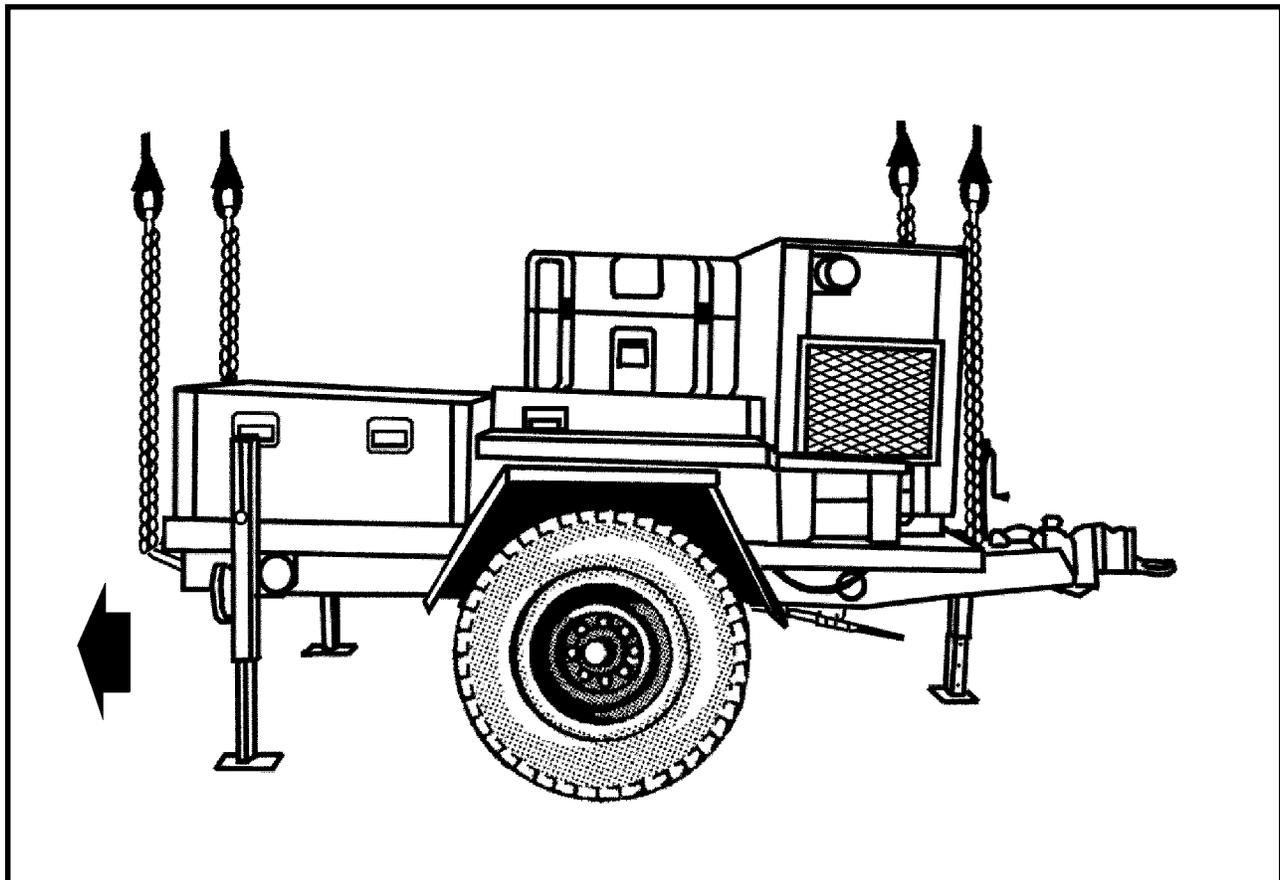
(e) Install the rear stabilizer legs with the lower support section fully retracted.

(f) Lower the front jack so the lunette is close to the ground.

(2) **Rigging.** Rig the load according to the steps in Figure 3-13.

(3) **Hookup.** The hookup teams stand in the bed of the trailer and on the drawbar. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 1 onto the forward cargo hook. The aft hookup person places apex fitting 2 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).



RIGGING STEPS

1. Connect 2 sling legs to apex fitting number 1. Position the apex fitting on top of the trailer.
2. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 3-13 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting on top of the trailer.
4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 3-13 in the grab hook.
5. Secure all excess chain with tape or Type III nylon cord.
6. Pad the chain/sling where they contact the trailer or generator.
7. Cluster and tie or tape (breakaway technique) the sling legs in each sling set together to prevent entanglement during hookup and lift-off.

Figure 3-13. Special Operations Media Systems on COPS Trailer

3-15. Deployable Print Production Center (DPPC) on COPS Trailer

a. Applicability. The following item in Table 3-14 is certified for the helicopter(s) listed in the following table by the Soldier Systems Center:

Table 3-14. Deployable Print Production Center (DPPC) on COPS Trailer

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Deployable Print Production Center on COPS Trailer	4,400	10K	5/35	CH-47	80
Deployable Print Production Center on COPS Trailer	4,400	15K	5/35	CH-53	110

b. Materials. The following materials are required to rig this load:

(1) Sling set (10,000-pound capacity) with one additional apex fitting.

OR

(2) Sling set (15,000-pound capacity) (2 each).

(3) Tape, adhesive, pressure-sensitive, 2-inch wide roll.

(4) Cord, nylon, Type III, 550-pound breaking strength.

(5) Webbing, cotton, 1/4-inch, 80-pound breaking strength.

(6) Felt sheet, cattle hair, Type IV, 1/2-inch or suitable substitute.

c. Personnel. Two persons can prepare and rig this load in 10 minutes.

d. Procedures. The following procedures apply to this load:

(1) **Preparation.** Prepare the load using the following steps:

(a) Engage the parking brake.

(b) Secure light cables, safety chains, and brake hoses to the top of the drawbar with tape or Type III nylon cord.

(c) Place additional cargo on the trailer bed and secure the cargo with CGU-1/B tiedown straps.

(d) Install the rear stabilizer legs with the lower support section fully retracted.

(e) Lower the front jack so the lunette is close to the ground.

(2) **Rigging.** Rig the load according to the steps in Figure 3-14.

(3) **Hookup.** The hookup teams stand in the bed of the trailer and on the drawbar. The static wand person discharges the static electricity with the static wand. The forward hookup person places apex fitting 2 onto the forward cargo hook. The aft hookup person places apex fitting 1 onto the aft cargo hook. The hookup team then carefully dismounts the vehicle and remains close to the load as the helicopter removes slack from the sling legs. When successful hookup is assured, the hookup team quickly exits the area underneath the helicopter to the designated rendezvous point.

(4) **Derigging.** Derigging is the reverse of the preparation and rigging procedures in steps d (1) and d (2).

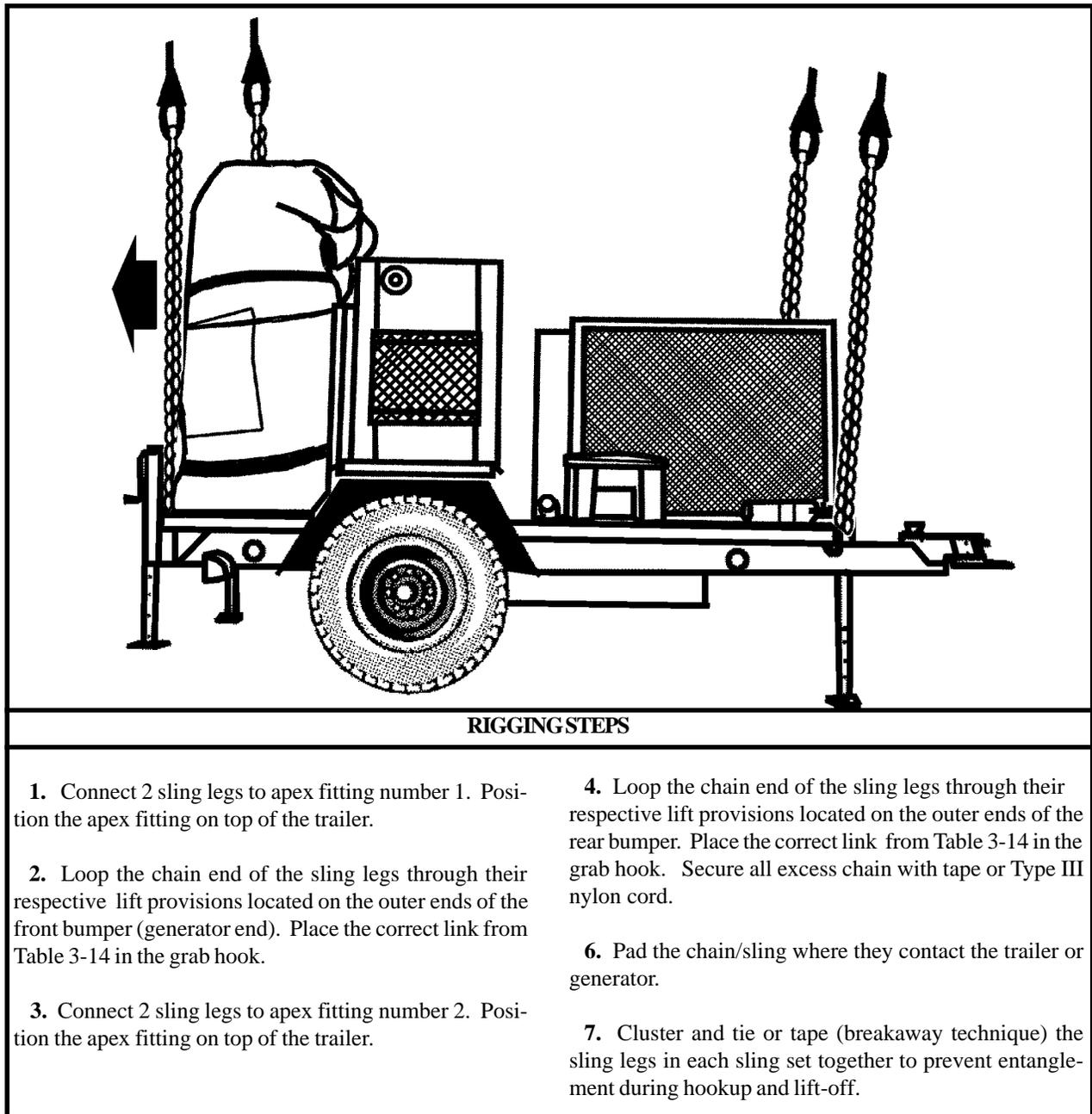


Figure 3-14. Deployable Print Production Center on COPS Trailer