

CHAPTER 4

CERTIFIED DUAL-POINT RIGGING PROCEDURES FOR TRAILERS WITH MOUNTED GENERATORS

4-1. INTRODUCTION

This chapter contains rigging procedures for dual-point trailers with mounted generators 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 para-

graph and identifies the certified loads. The certified dual-point rigging procedures for trailers with mounted generators are in this section. Paragraphs 4-2 through 4-6 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.

4-2. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

a. Applicability. The following items in Table 4-1 are certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 4-1. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
PU-751/M, 5kW, Generator Variants: LOS V1/V2/V3/V4 Planning Trailer Radio Access Trailer	3,000	10K	3/40	CH-47	75
PU-753/M, 10kW, Generator Variants: NC OPS Trailer SCC TECH Trailer NC MGMT Trailer LEN MGMT Trailer LEN OPS Trailer SEN V1 Trailer SEN V2 Trailer Maintenance #1 Trailer AN/TSQ-182	3,000	10K	3/40	CH-47	75

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.

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) 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) Partially retract all landing legs and secure in position with Type III nylon cord.

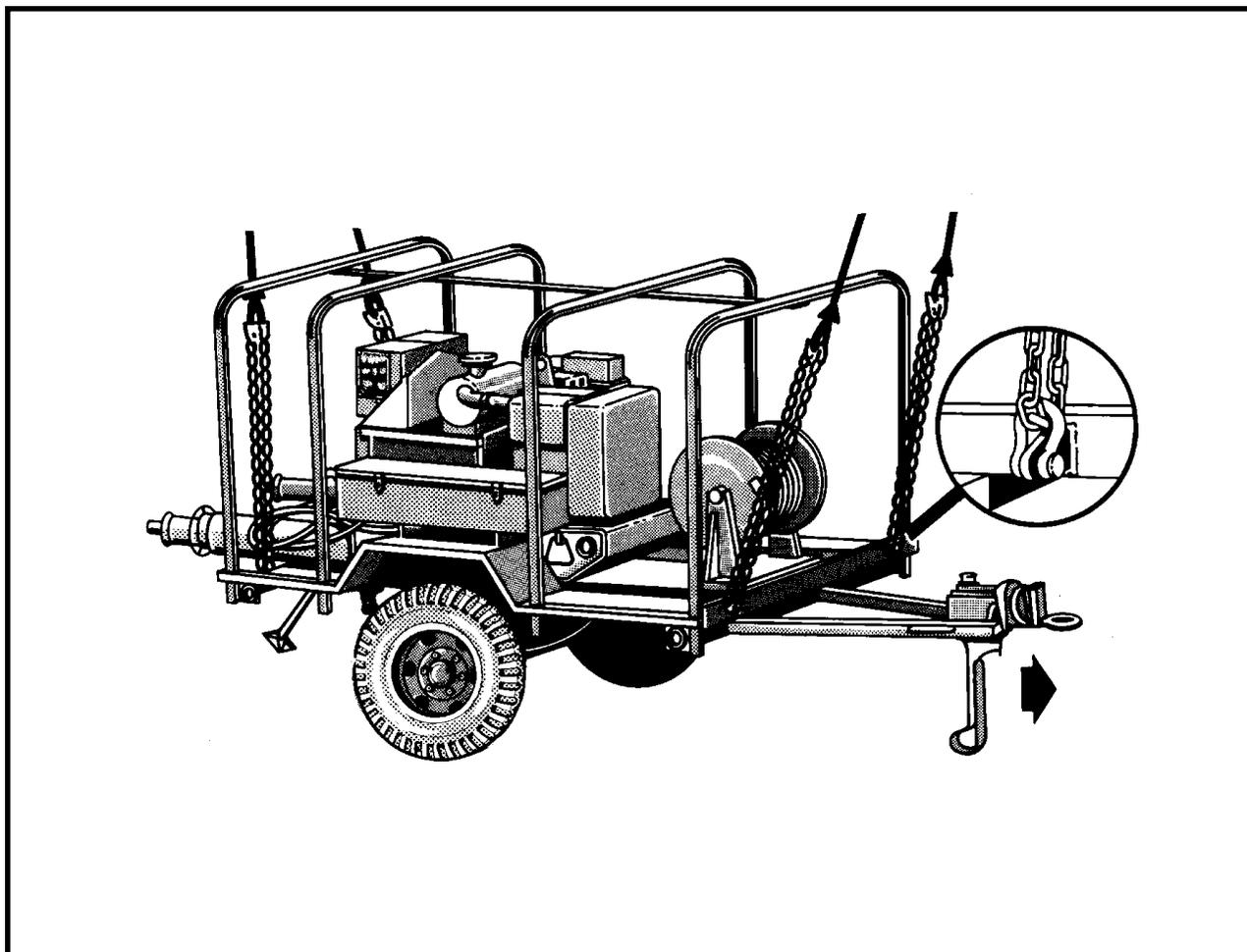
(d) Retract the lunette and secure in position with Type III nylon cord.

(e) Ensure the parking brake is set.

(2) **Rigging.** Rig the load according to the steps in Figure 4-1.

(3) **Hookup.** The hookup teams stand on the trailer fenders. 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 trailer 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 4-1 in the grab hook.
3. Connect 2 sling legs to apex fitting number 2. Position the apex fitting behind the generator.
4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 4-1 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 front sling legs on the top front of the generator set. Tape the sling legs to the front bow to prevent entanglement with the cable reel handle.
7. Cluster and tie or tape (breakaway technique) the rear sling legs on the top rear of the generator set.

Figure 4-1. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

4-3. M353 Trailer Chassis With Mounted Generators

a. Applicability. The following items in Table 4-2 are certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 4-2. M353 Trailer Chassis With Mounted Generators

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
M353 Trailer Chassis	2,720	15K	10/15	CH-53	120
MEP-005-A	6,220	15K	10/15	CH-53	120
MEP-006-A	7,720	15K	10/15	CH-53	120
MEP-114-A	6,220	15K	10/15	CH-53	120
MEP-115-A	6,320	15K	10/15	CH-53	120

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

- (1) Sling set (15,000-pound capacity) with one additional web ring.
- (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 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) Ensure the parking brake is set.

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

(3) **Hookup.** The hookup teams stand on 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 trailer 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).

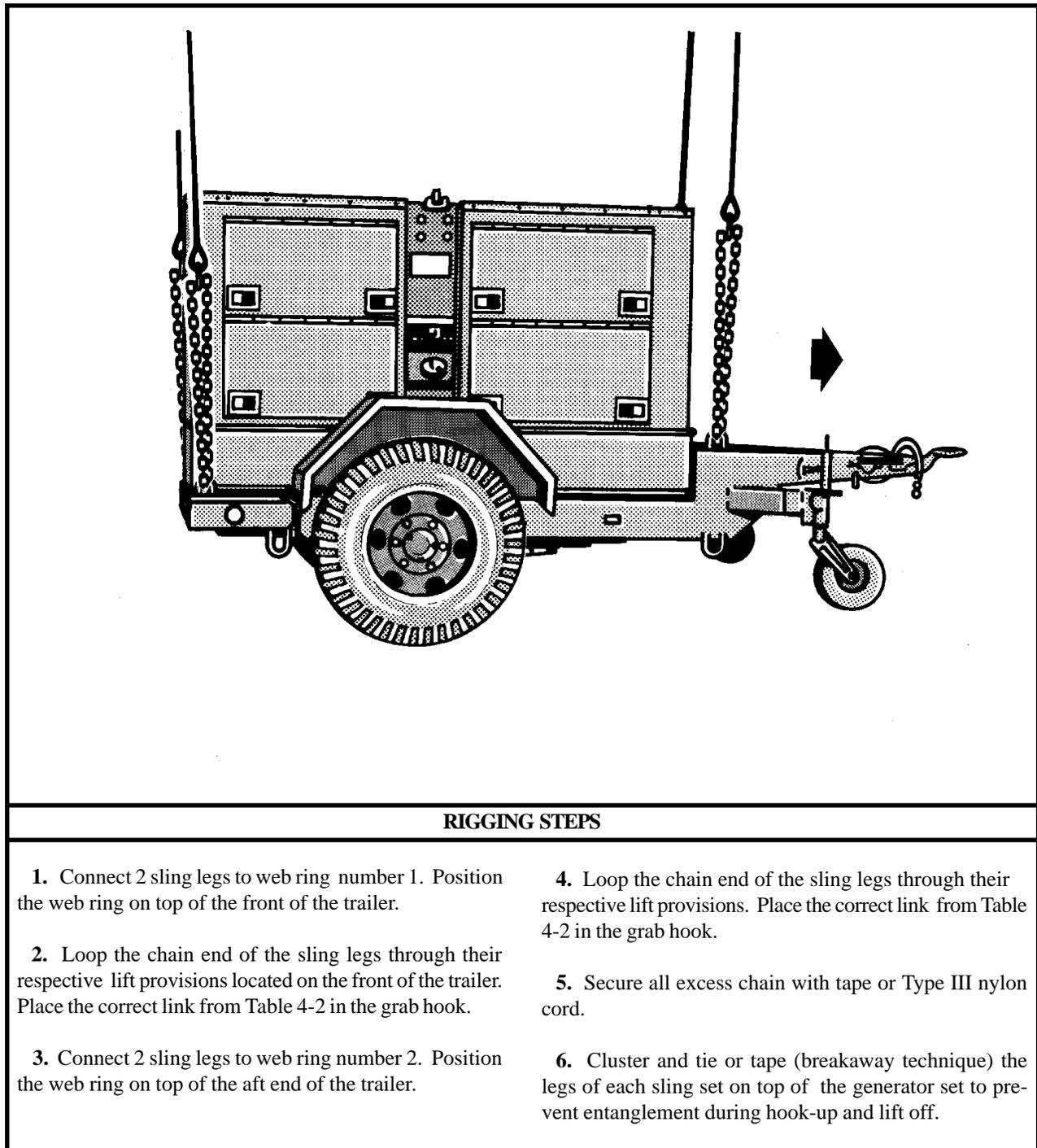


Figure 4-2. M353 Trailer Chassis With Mounted Generators

4-4. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants

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

Table 4-3. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
PU-405 A/M Power Unit, 15kW, with acoustic suppression kit (ASK)	6,740	10K	3/10	CH-47	80
PU-406 B/M Power Unit, 30kW, with acoustic suppression kit (ASK)	7,250	10K	3/10	CH-47	80

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.

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) 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) Lower the lunette as far as possible by adjusting the landing legs

(d) Ensure the hand brakes are set.

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

(3) **Hookup.** The hookup teams stand on the trailer fenders. 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 trailer 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).

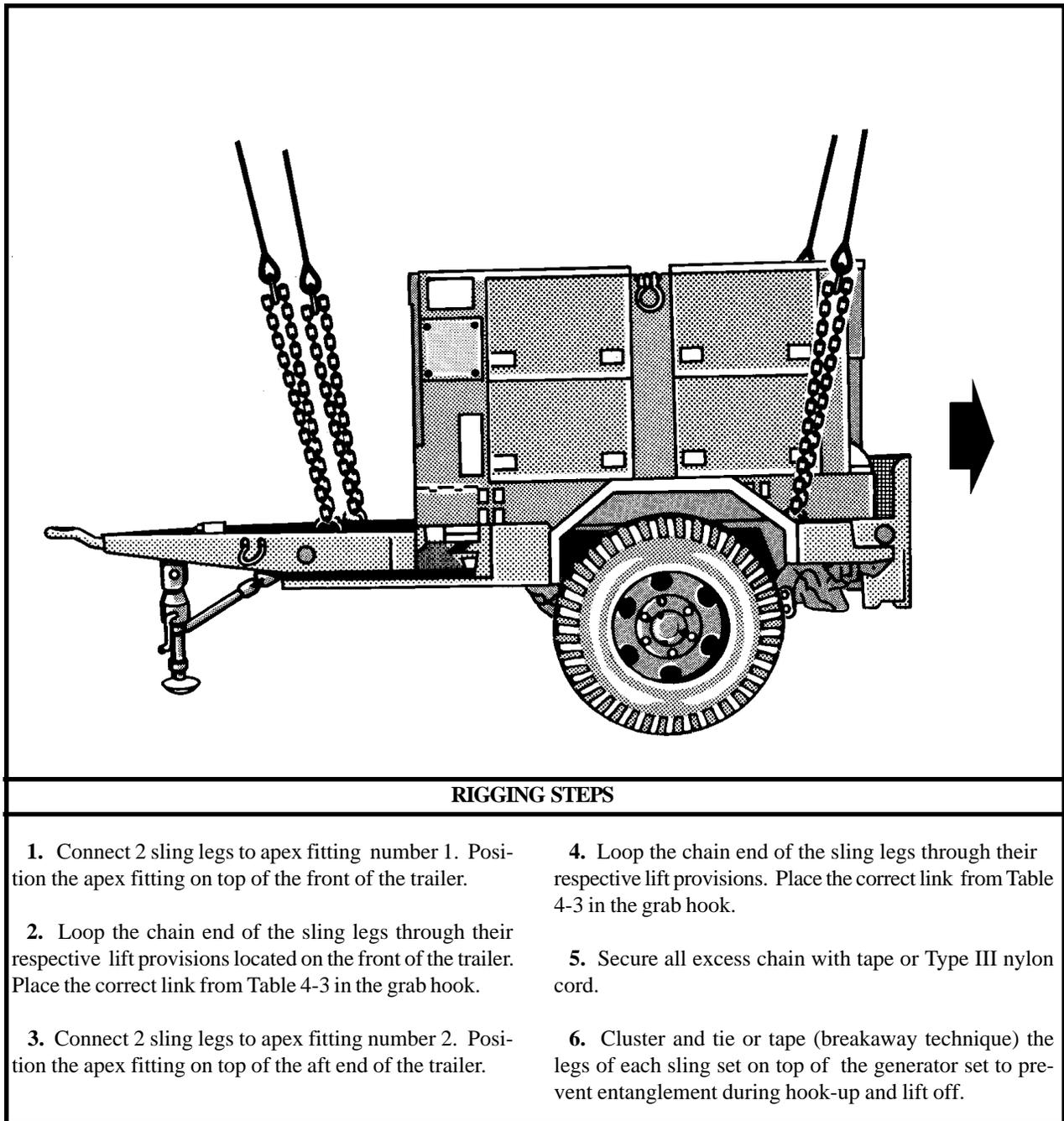


Figure 4-3. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants

4-5. High Mobility Trailer with AN/MJQ-35A Power Unit

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

Table 4-4. High Mobility Trailer with AN/MJQ-35A Power Unit

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
AN/MJQ-35A, 5kW, 60Hz, Power Plant	3,540	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.

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) Remove the rear stabilizer legs from their stowage location and install them with the lower support section fully retracted.

(d) Lower the lunette as close as possible to the ground.

(e) Ensure the hand brakes are set.

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

(3) **Hookup.** The hookup teams stand on the trailer bed. 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 trailer 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).

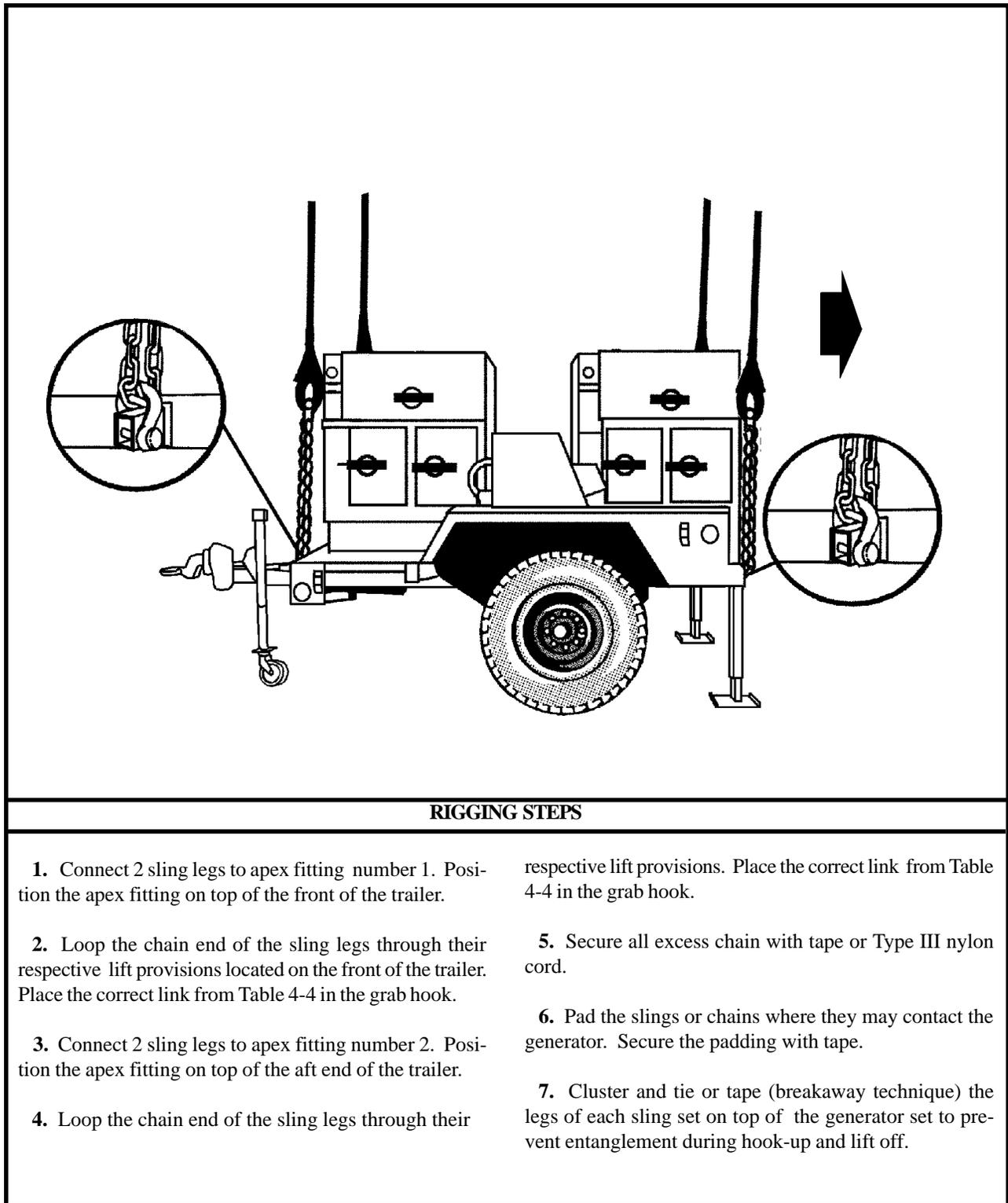


Figure 4-4. High Mobility Trailer with AN/MJQ-35A Power Unit

4-6. Aviation Ground Power Unit

a. Applicability. The following item in Table 4-5 is certified for the helicopter(s) listed in the following table by the US Army Soldier Systems Center:

Table 4-5. Aviation Ground Power Unit

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/ REAR	TYPE OF AIRCRAFT	RECOMMENDED AIRSPEED (KNOTS)
Aviation Ground Power Unit	4,190	10K	3/3	CH-47	100

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) Strap, cargo, tie-down, CGU-1/B (4 each).
- (6) Webbing, nylon, tubular, 1/2-inch, 1000-pound breaking strength.

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) Stow and secure the tow bar in the raised position with 1/2-inch tubular nylon webbing.
 - (b) Secure all loose equipment inside the unit with Type III nylon cord. Close all doors and secure the handles with tape.

(c) Route a CGU-1/B tie-down strap horizontally around the unit. Position the strap 16 inches down from the top of the unit. Repeat this procedure with a second strap positioned 8 inches above the first strap.

(d) Route a strap through the forklift provision and vertically around the unit. Repeat this procedure using the second forklift provision.

(e) Tape or remove the exhaust cover to prevent damage during flight.

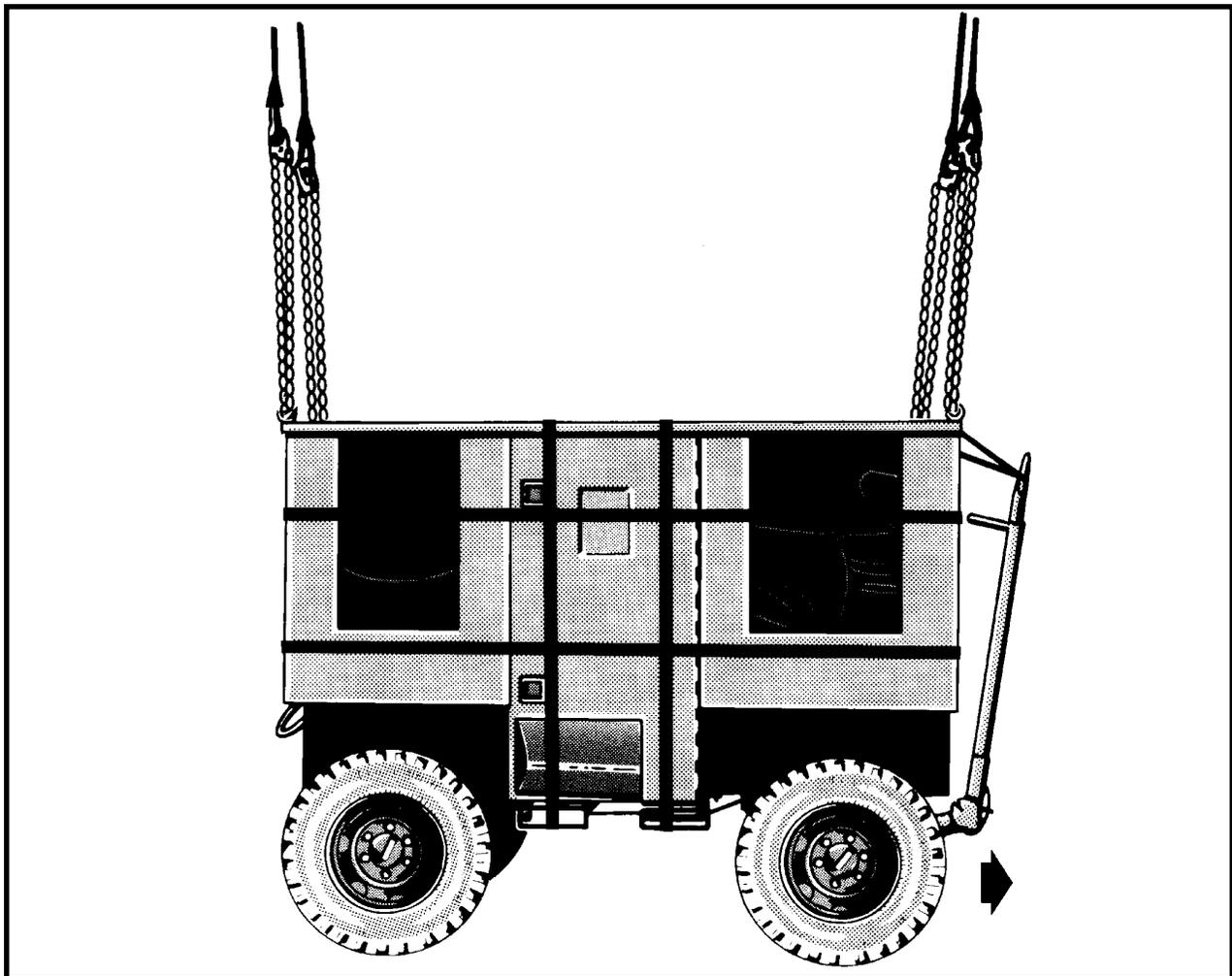
(f) Ensure the hand brakes are set.

(g) Ensure the fuel tank is not more than 3/4 full. Inspect fuel tank cap, oil filler caps, and battery caps to ensure they are installed properly and are secure.

(2) **Rigging.** Rig the load according to the steps in Figure 4-5.

(3) **Hookup.** The hookup teams stand on top of the unit. 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 trailer 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 tongue end of the unit.

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 4-5 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 unit.

4. Loop the chain end of the sling legs through their respective lift provisions. Place the correct link from Table 4-5 in the grab hook.

5. Cluster and tie or tape (breakaway technique) the legs of each sling set on top of the generator set to prevent entanglement during hook-up and lift off.

Figure 4-5. Aviation Ground Power Unit