

CHAPTER 4

CERTIFIED SINGLE-POINT RIGGING PROCEDURES FOR TRAILERS WITH MOUNTED GENERATORS

4-1. INTRODUCTION

This chapter contains rigging procedures for single-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 single-point rigging proce-

dures for trailers are in this section. Paragraphs 4-2 through 4-10 give detailed instructions for rigging loads.

NOTE: Reach Pendants may be used on all single point loads. A static discharge person is not required when using a Reach Pendant.

4-2. M353 Trailer Chassis with Mounted Generators

a. Applicability. The following items in Table 4-1 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-1. M353 Trailer Chassis with Mounted Generators

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
M353 Trailer Chassis	2,720	10K	20/3	100
MEP-005A	6,220	10K	20/3	100
MEP-006A	7,720	10K	20/3	100
MEP-114A	6,220	10K	20/3	100
MEP-115A	6,320	10K	20/3	100

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

- (1) Sling set (10,000-pound capacity).
- (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) Engage both hand brakes.
 - (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.

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

(3) **Hookup.** The hookup team stands on top of the generator. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft 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).

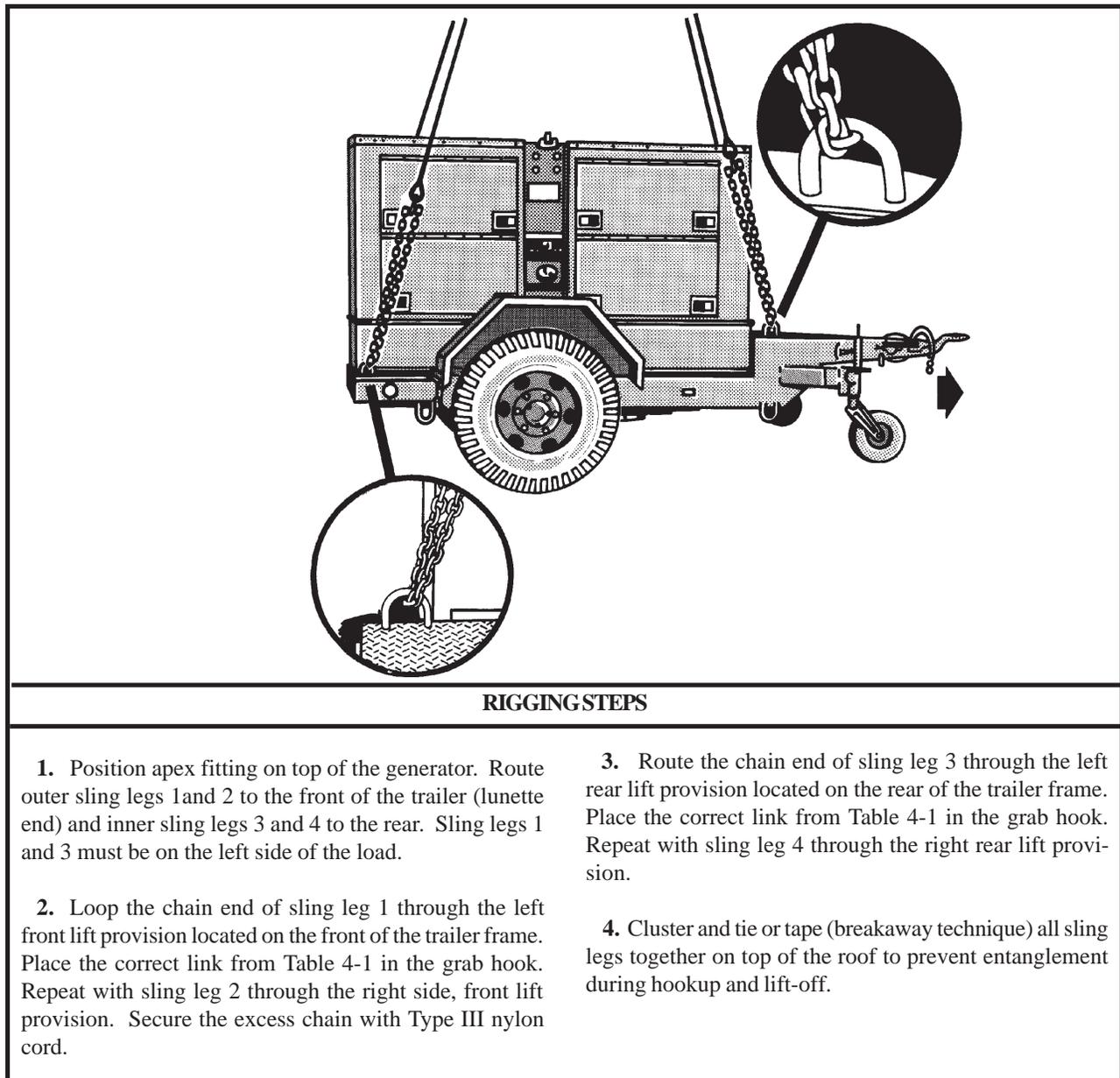


Figure 4-1. M353 Trailer Chassis with Mounted Generators

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

a. Applicability. The following items in Table 4-2 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-2. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Generator set, 15 kW, 6113	5,119	10K	3/23	100
Generator set, 30 kW, CE301ACWK1	5,625	10K	3/28	100
Generator set, 45 kW, 52300	6,885	10K	3/30	100
Generator set, 60 kW, MEP-006A	7,347	10K	3/33	100
AN/MJQ-12A, Unit A, 60 kW, 50/60 Hz Power Unit with MEP 006A, 60 kW, 50/60 Hz, generator set with switch box	8,060	10K	10/3	90
AN/MJQ-12A, Unit B, 60 kW, 50/60 Hz Power Unit with MEP 806A, 60 kW, 50/60 Hz, generator set (no switch box)	7,980	10K	10/3	90
AN/MJQ-39, Unit A, 15 kW, 400 Hz Power Unit with MEP 814A, 15 kW, 400 Hz, generator set with switch box	5,255	10K	3/3	80
AN/MJQ-39, Unit B, 15 kW, 400 Hz Power Unit with MEP 814A, 15 kW, 400 Hz, generator set (no switch box)	5,255	10K	3/3	80
AN/MJQ-40, Unit A, 30 kW, 50/60 Hz Power Unit with MEP 805A, 30 kW, 50/60 Hz, generator set with switch box	6,100	10K	3/3	90
AN/MJQ-40, Unit B, 30 kW, 50/60 Hz Power Unit with MEP 805A, 30 kW, 50/60 Hz, generator set (no switch box)	6,100	10K	3/3	90

Table 4-2. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants (continued)

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
AN/MJQ-41, Unit A, 60 kW, 50/60 Hz Power Unit with MEP 806A, 60 kW, 50/60 Hz, generator set with switch box	6,720	10K	3/3	70
AN/MJQ-41, Unit B, 60 kW, 50/60 Hz Power Unit with MEP 806A, 60 kW, 50/60 Hz, generator set (no switch box)	6,720	10K	3/3	70
PU-405 A/M Power Unit, 15 kW, without acoustic suppression kit (ASK)	6,119	10K	3/33	100
PU-405 A/M Power Unit, 15 kW, with acoustic suppression kit (ASK)	6,740	10K	3/28	80
PU-406 B/M Power Unit, 30 kW, with acoustic suppression kit (ASK)	7,520	10K	3/28	80
PU-650 B/G, 60 kW, 50/60 Hz Power Unit with MEP 006A, 60 kW, 50/60 Hz generator set	7,800	10K	10/3	90
PU-707 A/M, 60 kW, 400 Hz Power Unit with MEP 115A, 60 kW, 400 Hz generator set	7,800	10K	10/3	90
PU-732 Power Unit, 15 kW, with acoustic suppression kit (ASK)	6,690	10K	3/28	80
PU-760 Power Unit, 30 kW, with acoustic suppression kit (ASK)	7,240	10K	3/28	80
PU-800, 15 kW, 400 Hz Power Unit with MEP 814A, 15 kW, 400 Hz, generator set	5,255	10K	3/3	80
PU-802, 15 kW, 50/60 Hz Power Unit with MEP 804A, 15 kW, 50/60 Hz, generator set	5,320	10K	3/3	80
PU-803, 30 kW, 50/60 Hz Power Unit with MEP 805A, 30 kW, 50/60 Hz, generator set	6,100	10K	3/3	90

Table 4-2. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants (continued)

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
PU-804, 30 kW, 400 Hz Power Unit with MEP 815A, 30 kW, 400 Hz, generator set	6,130	10K	3/3	90
PU-805, 60 kW, 50/60 Hz Power Unit with MEP 806A, 60 kW, 50/60 Hz, generator set	7,120	10K	3/3	70
PU-806, 60 kW, 400 Hz Power Unit with MEP 816A, 60 kW, 400 Hz, generator set	7,215	10K	3/3	70
PU-794/G Regency Net Power Unit	6,600	10K	3/18	90

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (as required).

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) Lower the lunette as far as possible.
- (b) Engage both hand brakes.
- (c) Secure safety chains and brake hoses to the top of the drawbar with Type III nylon cord.

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

(e) Secure the fire extinguisher (if installed) with Type III nylon cord.

(f) Secure the landing legs in the up position with the safety pins. Secure the safety pins with tape.

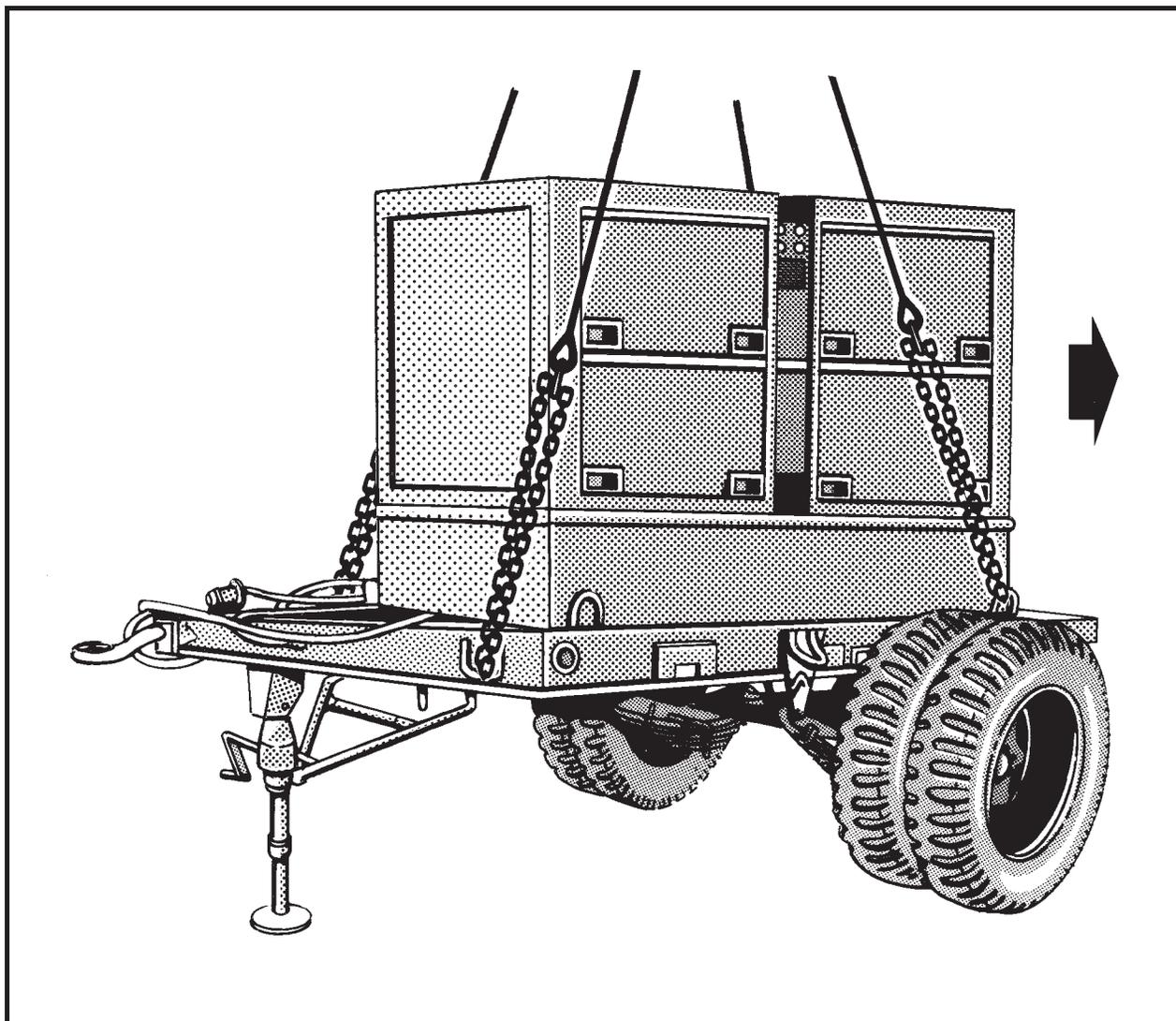
(g) Place additional cargo as close to the center of the trailer as possible. The cargo must not contact the sling legs during lift-off or flight.

NOTE: The load must not weigh more than the maximum allowable weight during sling load operations.

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

(3) **Hookup.** The hookup team stands on top of the generator. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft 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. Position apex fitting on top of the generator. Route outer sling legs 1 and 2 to the front of the trailer (lunette end) and inner sling legs 3 and 4 to the rear. Sling legs 1 and 3 must be on the left side of the load.

2. Loop the chain end of sling leg 1 through the left front lift provision located on the front of the trailer frame. Place the correct link from Table 4-2 in the grab hook. Repeat with sling leg 2 through the right side, front lift provision. Secure the excess chain with Type III nylon cord.

3. Route the chain end of sling leg 3 through the left rear lift provision located on the rear of the trailer frame. Place the correct link from Table 4-2 in the grab hook. Repeat with sling leg 4 through the right rear lift provision.

4. Cluster and tie or tape (breakaway technique) all sling legs together on top of the roof to prevent entanglement during hookup and lift-off.

Figure 4-2. M200A1 Trailer-Mounted Power Units, Generators, and Power Plants

4-4. M103A3 Trailer-Mounted Power Units, Generators, and Power Plants

a. Applicability. The following items in Table 4-3 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-3. M103A3 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
AN/MJQ-16 Power Unit, 5 kW, 60 Hz	5,100	10K	5/10	120
AN/MJQ-18 Power Unit, 10 kW, 60 Hz	5765	10K	5/10	120
AN/MJQ-25 Power Unit, 10 kW, 400 Hz	5750	10K	5/10	120

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (as required).

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:

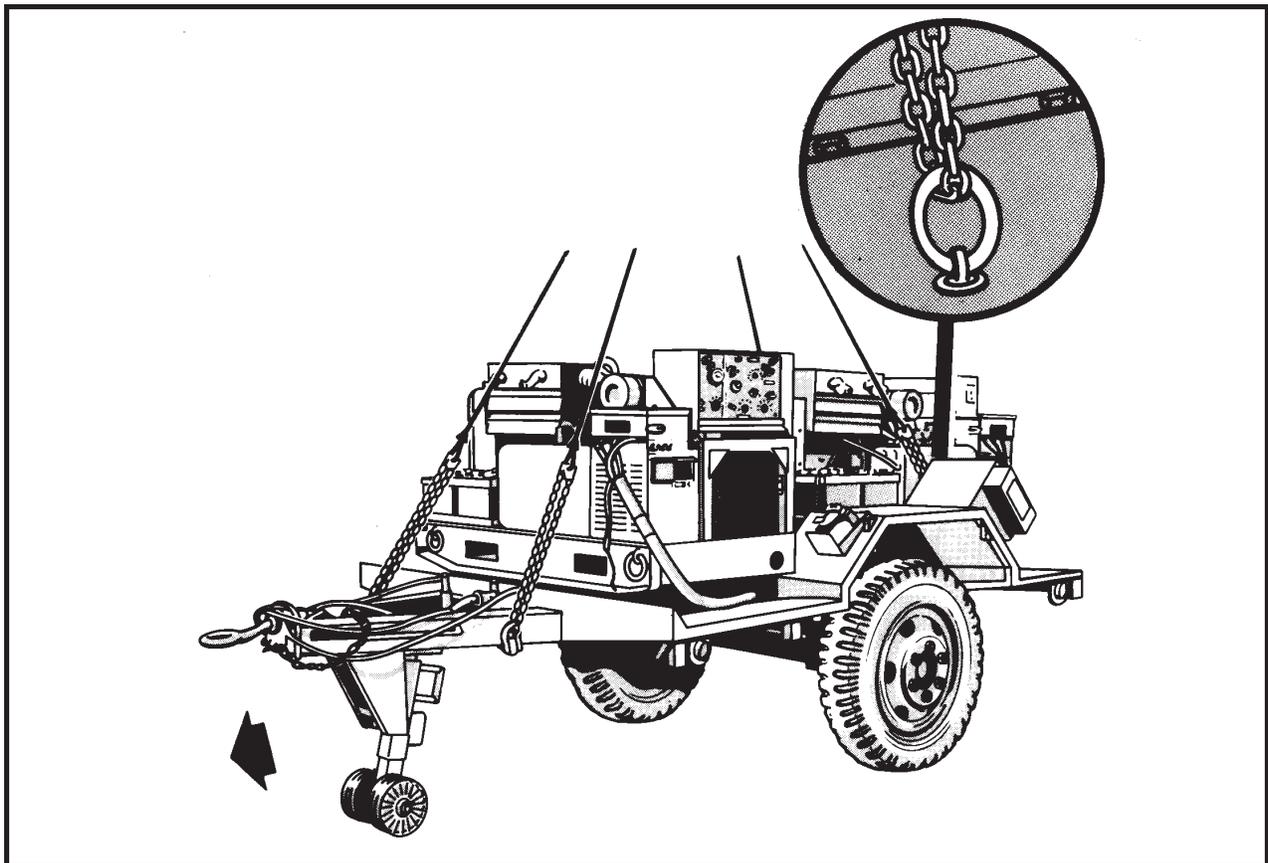
(a) Remove the canvas top and bows. Secure the top and bows on the generator trailer or coordinate the

transportation for the canvas top and bows.

- (b) Ensure the fuel tank is less than 3/4 full.
 - (c) Engage both hand brakes.
 - (d) Secure safety chains and brake hoses to the top of the drawbar with Type III nylon cord.
 - (e) Secure all lids, doors, and caps with tape or Type III nylon cord.
- (2) **Rigging.** Rig the load according to the steps in Figure 4-3.

(3) **Hookup.** The hookup person stands on top of the generator. The static wand person stands on the wheel well. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft 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. Position apex fitting on top of the generator. Route outer sling legs 1 and 2 to the front of the trailer (lunette end) and inner sling legs 3 and 4 to the rear. Sling legs 1 and 3 must be on the left side of the load.

2. Loop the chain end of sling leg 1 through the left front lift provision located on the outboard side of the trailer A-frame. Place the correct link from Table 4-3 in the grab hook. Repeat with sling leg 2 through the right side, front lift provision. Secure the excess chain with Type III nylon cord.

3. Route the chain end of sling leg 3 through the left rear lift ring located on the trailer deck aft of the wheel

well. Place the correct link from Table 4-3 in the grab hook. Repeat with sling leg 4 through the right rear lift provision.

4. Secure the rear lift provisions in the up position to the generator tiedown provisions with Type III nylon cord.

5. Pad the slings in the areas where they contact the generators.

6. Cluster and tie or tape (breakaway technique) the front sling legs together to prevent entanglement during hookup and lift-off. Repeat the procedure for the rear sling legs.

Figure 4-3. M103A3 Trailer-Mounted Power Units, Generators, and Power Plants

4-5. M103A3/A4 Trailer-Mounted Power Units, Generators, and Power Plants

a. Applicability. The following items in Table 4-4 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-4. M103A3/A4 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
AN/MJQ-37 Power Unit with two (2) MEP-803A, 10 kW, 60 Hz, generator sets	4,735	10K	15/3	90
AN/MJQ-38 Power Unit with two (2) MEP-813A, 10 kW, 400 Hz, generator sets	4,735	10K	15/3	90

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (as required).

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 both hand brakes.
 - (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.

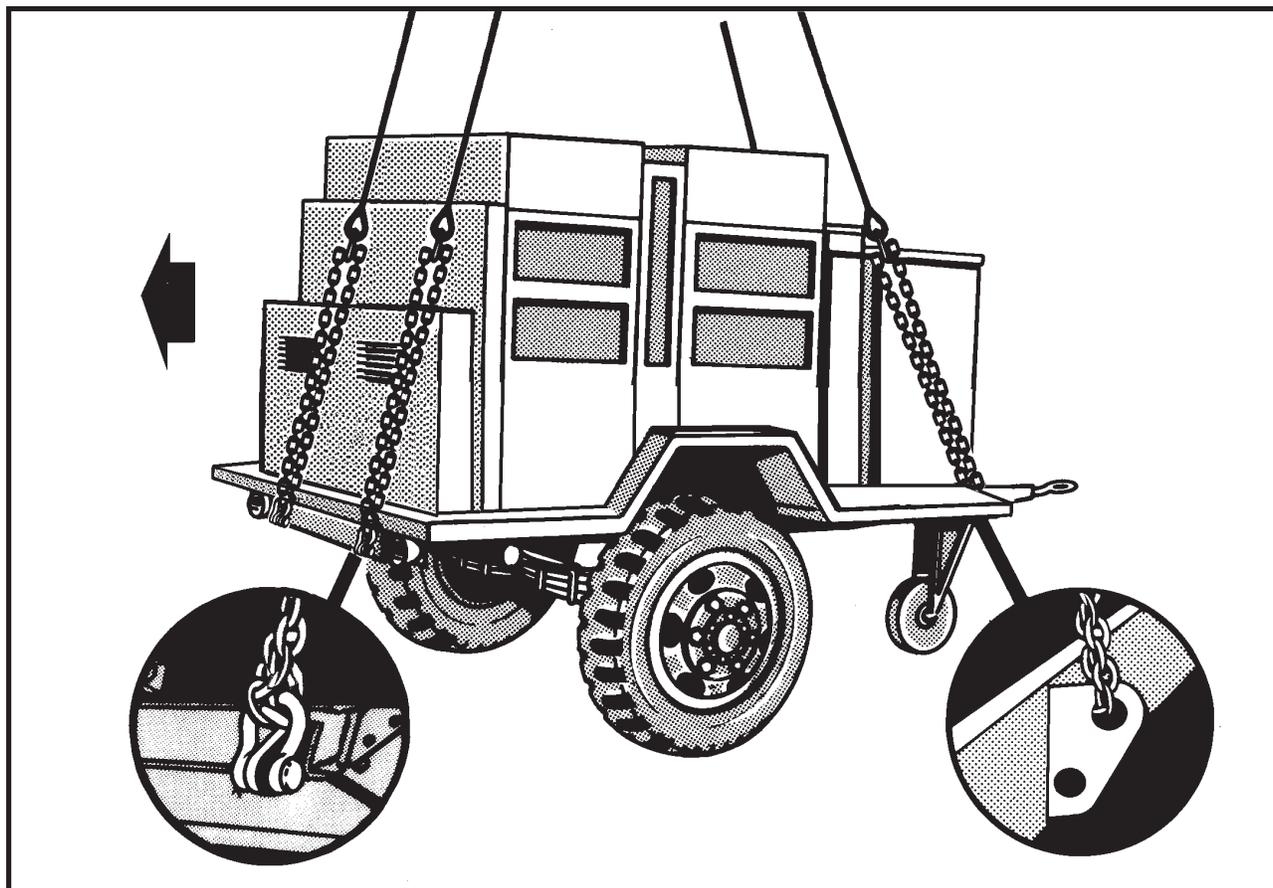
(d) Ensure the rear lift provisions, located on the rear of the trailer frame, are free to rotate. Secure the pins with tape.

(e) Place additional cargo as close to the center of the trailer as possible. The cargo must not contact the sling legs during lift-off or flight.

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

(3) **Hookup.** The hookup person stands on top of the generator. The static wand person stands on the wheel well. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft 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. Position apex fitting on top of the generator. Route outer sling legs 1 and 2 to the front of the trailer (lunette end) and inner sling legs 3 and 4 to the rear. Sling legs 1 and 3 must be on the left side of the load.

2. Loop the chain end of sling leg 1 through the left front lift provision located on the left side of the trailer A-frame. Place the correct link from Table 4-4 in the grab hook. Repeat with sling leg 2 through the right side, front lift provision. Secure the excess chain with Type III nylon cord.

3. Route the chain end of sling leg 3 through the left rear lift provision located on the rear of the trailer frame. Place the correct link from Table 4-4 in the grab hook.

Repeat with sling leg 4 through the right rear lift provision.

4. Secure the rear lift provisions in the up position to the generator tiedown provisions with Type III nylon cord.

5. Raise the apex fitting above the generators and route the rear slings to the side of the rear generator.

6. Pad the slings in the areas where they contact the generators.

7. Cluster and tie or tape (breakaway technique) the front sling legs together to prevent entanglement during hookup and lift-off. Repeat the procedure for the rear sling legs.

Figure 4-4. M103A3/A4 Trailer-Mounted Power Units, Generators, and Power Plants

4-6. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

a. Applicability. The following items in Table 4-5 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-5. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
PU-751/M, 5 kW, Generator Variants: LOS V1/V2/V3/V4 Planning Trailer Radio Access Trailer	3,000	10K	3/40	75
PU-753/M 10 kW Generator Variants: NC OPS Trailer SCC TECH Trailer NC MGMT Trailer LEN MGNT Trailer LEN OPS Trailer SEN V1 Trailer SEN V2 Trailer Maintenance #1 Trailer AN/TSQ-182	3,000	10K	3/40	75
AN/MJQ-32 Power Unit with Acoustic Suppression Kit, 3 kW	3,120	10K	7/3	120
AN/MJQ-33 Power Unit with Acoustic Suppression Kit, 3 kW	2,858	10K	7/3	100

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (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) Engage both hand brakes.
- (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.

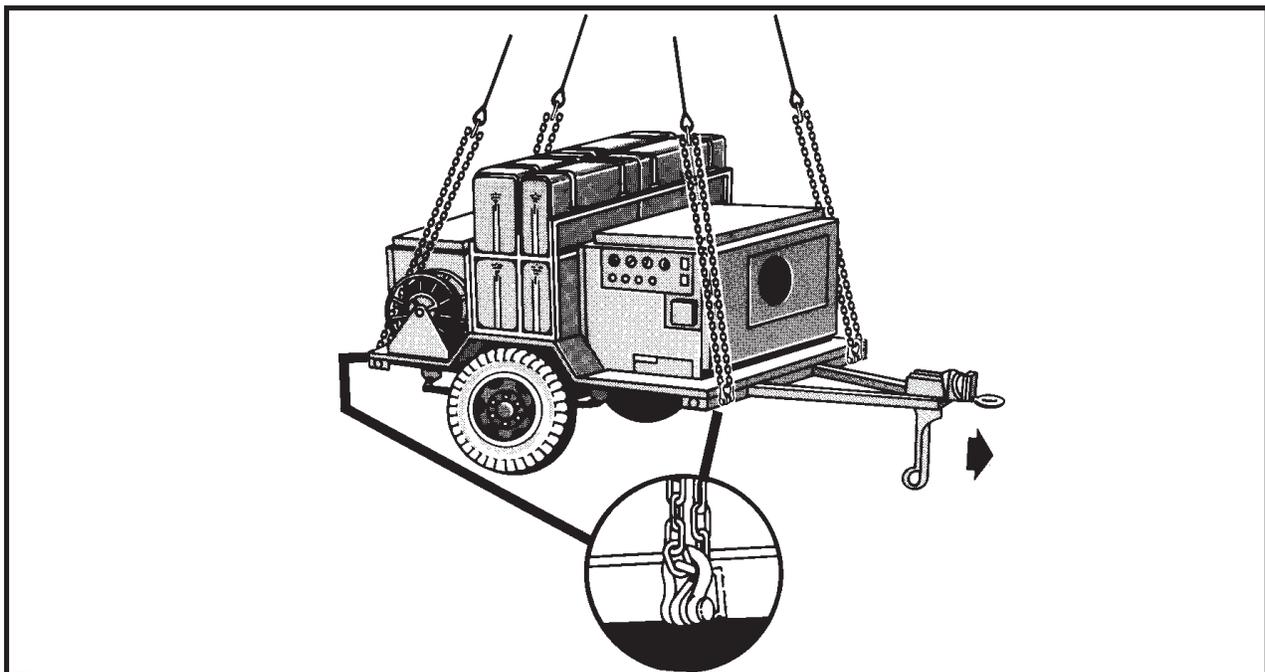
(d) Remove the tarp and bows from the trailer and secure in appropriate place on trailer. Secure the tarp and bows with tiedown straps (if required).

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

(3) **Hookup.** The hookup person stands on top of the generator. The static wand person stands on the wheel well. The static wand person discharges the static elec-

tricity with the static wand. The hookup person places the apex fitting onto the aircraft 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. Position apex fitting on top of the generator. Route outer sling legs 1 and 2 to the front of the trailer (lunette end) and inner sling legs 3 and 4 to the rear. Sling legs 1 and 3 must be on the left side of the load.

2. Loop the chain end of sling leg 1 through the left front lift provision located on the left front side of the trailer bed. Place the correct link from Table 4-5 in the grab hook. Repeat with sling leg 2 through the right side, front lift provision. Secure the excess chain with Type III nylon cord.

3. Route the chain end of sling leg 3 through the left rear lift provision located on the rear of the trailer bed. Place the correct link from Table 4-5 in the grab hook. Re-

peat with sling leg 4 through the right rear lift provision.

4. Secure the lift provisions in the up position to the generator tiedown provisions with 1/4-inch cotton webbing.

5. Raise the apex fitting above the generators and route the rear slings to the side of the rear generator.

6. Pad the slings in the areas where they contact the tool boxes or the generators.

7. Cluster and tie or tape (breakaway technique) the sling legs together to prevent entanglement during hookup and lift-off.

Figure 4-5. M116A2 Trailer-Mounted Power Units, Generators, and Power Plants

4-7. M116A3 Trailer-Mounted Power Units, Generators, and Power Plants

a. Applicability. The following items in Table 4-6 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-6. M116A3 Trailer-Mounted Power Units, Generators, and Power Plants

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
AN/MJQ-43 Power Unit with two (2) MEP-831A, 3 kW, 60 Hz, generator sets	2,060	10K	3/3	80
AN/MJQ-35 Power Unit with two (2) MEP-802A, 5 kW, 60 Hz, generator sets	3,160	10K	3/3	80
PU-797, 5 kW, 60 Hz, Power Unit with MEP-802A, 5 kW, 60 Hz, generator set	2,720	10K	3/3	70
PU-798, 10 kW, 60 Hz, Power Unit with MEP-803A, 10 kW, 60 Hz, generator set	2,860	10K	3/3	70
PU-799, 10 kW, 400 Hz, Power Unit with MEP-813A, 10 kW, 400 Hz, generator set	2,870	10K	3/3	70
PU-801, 15 kW, 50/60 Hz, Power Unit with MEP-804A, 15 kW, 50/60 Hz, generator set	3,160	10K	15/3	100

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (as required).

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 both hand brakes.
- (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.

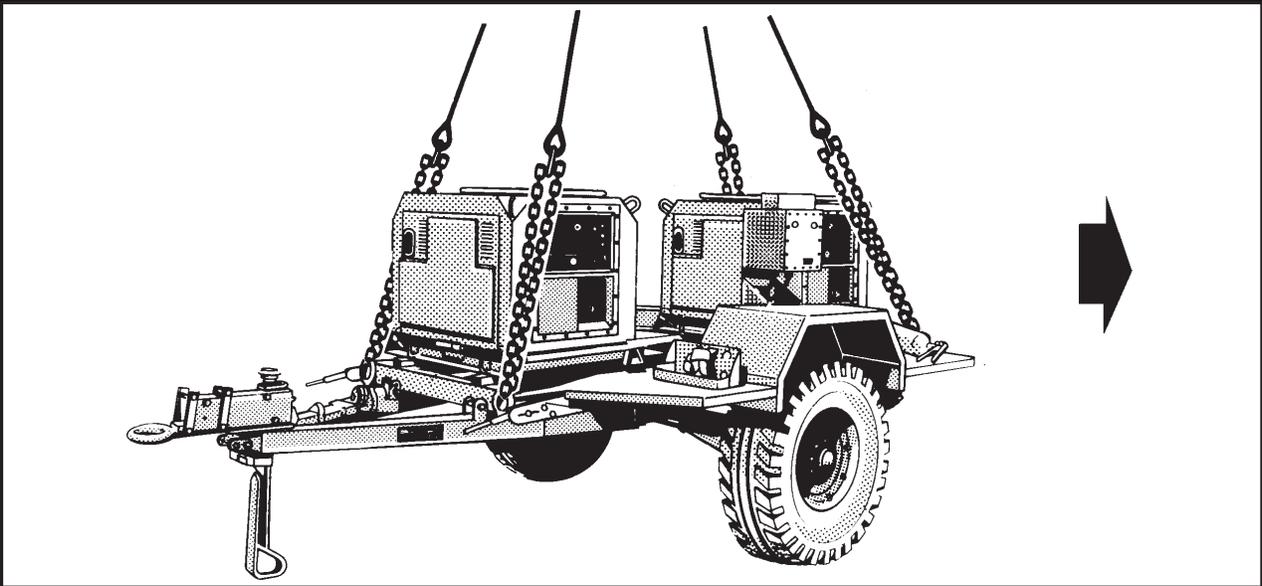
(d) Place additional cargo as close to the center of the trailer as possible. Secure the cargo with CGU-1/B tiedown straps. The cargo must not contact the sling legs during lift-off or flight.

(2) **Rigging.** Rig the load according to the steps in Figure 4-6.

(3) **Hookup.** The hookup person stands on top of the generator. The static wand person stands on the wheel well. The static wand person discharges the static elec-

tricity with the static wand. The hookup person places the apex fitting onto the aircraft 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

CAUTION
DO NOT ADD CARGO TO THE
PU-801 GENERATOR SET

1. Position apex fitting on top of the generator. Route outer sling legs 1 and 2 to the front of the trailer (lunette end) and inner sling legs 3 and 4 to the rear. Sling legs 1 and 3 must be on the left side of the load.
2. Loop the chain end of sling leg 1 through the left front lift provision located on the left front side of the trailer bed. Place the correct link from Table 4-6 in the grab hook. Repeat with sling leg 2 through the right side, front lift provision. Secure the excess chain with Type III nylon cord.
3. Route the chain end of sling leg 3 through the left rear lift provision located on the rear of the trailer bed. Place the correct link from Table 4-6 in the grab hook. Repeat with sling leg 4 through the right rear lift provision.
4. Secure the lift provisions in the up position to the generator tiedown provisions with 1/4-inch cotton webbing.
5. Raise the apex fitting above the generators and route the rear slings to the side of the rear generator.
6. Pad the slings in the areas where they contact the tool boxes or the generators.
7. Cluster and tie or tape (breakaway technique) the front sling legs together to prevent entanglement during hookup and lift-off. Repeat the procedure for the rear sling legs.

Figure 4-6. M116A3 Trailer Mounted Power Units, Generators, and Power Plants

4-8. High Mobility Trailer (HMT) with AN/MJQ-35A Power Plant

a. Applicability. The following item in Table 4-7 is certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-7. High Mobility Trailer (HMT) with AN/MJQ-35A Power Plant

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
AN/TMQ-35A, 5 kW, 60 Hz, Power Plant	3,540	10K	20/3	80

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (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.

(2) **Rigging.** Rig the load according to the steps in Figure 4-7.

(3) **Hookup.** The hookup team stands on the drawbar or the bed of the trailer. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft cargo hook. The hookup team then carefully dismounts the trailer on the lunette end of 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).

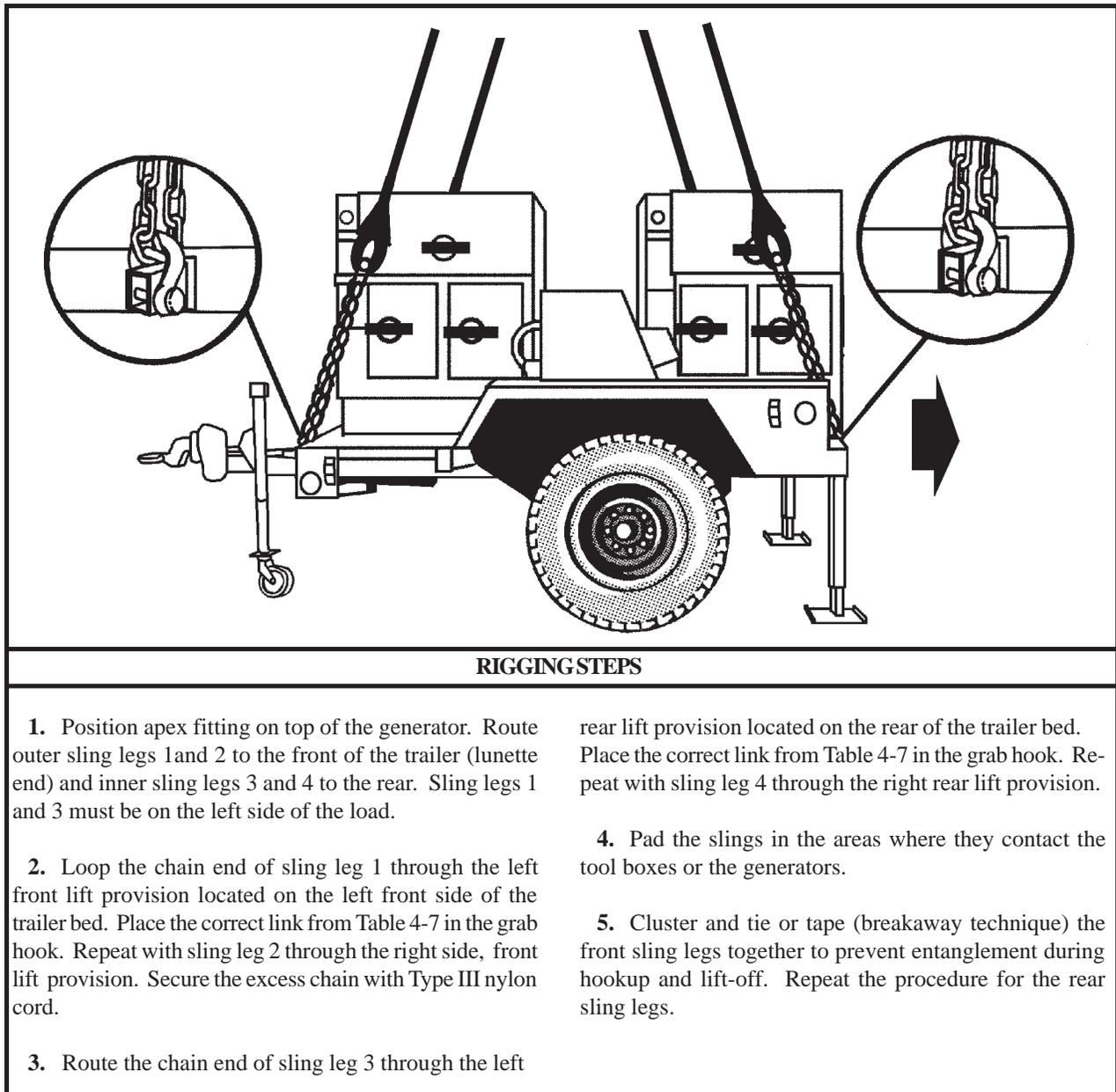


Figure 4-7. High Mobility Trailer (HMT) with AN/MJQ-35A Power Plant

4-9. High Mobility Trailer (HMT) with Tactical Quiet Generator Power Units

a. Applicability. The following items in Table 4-8 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-8. High Mobility Trailer (HMT) with Tactical Quiet Generator Power Units

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
PU-797A 5 kW, 60 Hz, Power Unit with MEP 802A generator set	2,657	10K	3/15	70
PU-798A 10 kW, 60 Hz, Power Unit with MEP 803A generator set	2,880	10K	3/15	70
PU-799A 10 kW, 400 Hz, Power Unit with MEP 813A generator set	2,910	10K	3/15	70
PU-801A 15 kW, 60 Hz, Power Unit with MEP 804A generator set	3,800	10K	3/3	100

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

- (1) Sling set (10,000-pound capacity).
- (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, CGU/1B (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 4-8.

CAUTION

The routing of the sling legs is reversed from the standard routing found in this manual. Sling legs 1 and 2 are routed to the rear of the trailer to increase the clearance between the sling legs and the generator.

(3) **Hookup.** The hookup team stands on the drawbar or the bed of the trailer. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft cargo hook. The hookup team then carefully dismounts the trailer on the lunette end of 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).

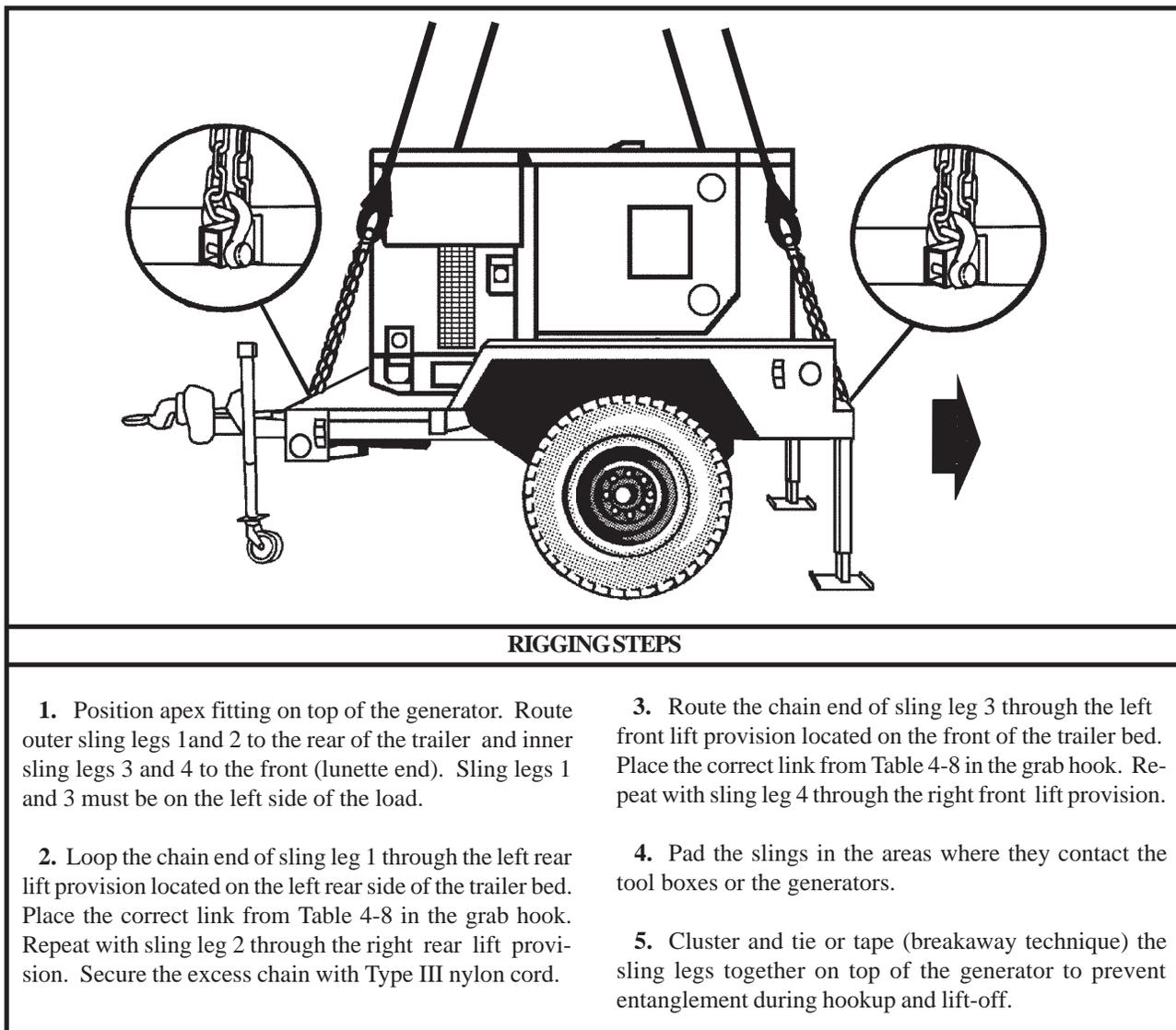


Figure 4-8. High Mobility Trailer (HMT) with Tactical Quiet Generator Power Units

4-10. High Mobility Trailers (HMT) with Generator For Joint Surveillance Target Attack Radar (JSTAR) System

a. Applicability. The following items in Table 4-9 are certified for all helicopters with suitable lift capacity by the US Army Natick Research, Development, and Engineering Center:

Table 4-9. High Mobility Trailers (HMT) with Generator (JSTAR)

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

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

- (1) Sling set (10,000-pound capacity).
- (2) Chain length, part number 38850-00053-10, 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 4-9.

(3) **Hookup.** The hookup team stands in the bed of the trailer. The static wand person discharges the static electricity with the static wand. The hookup person places the apex fitting onto the aircraft 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).

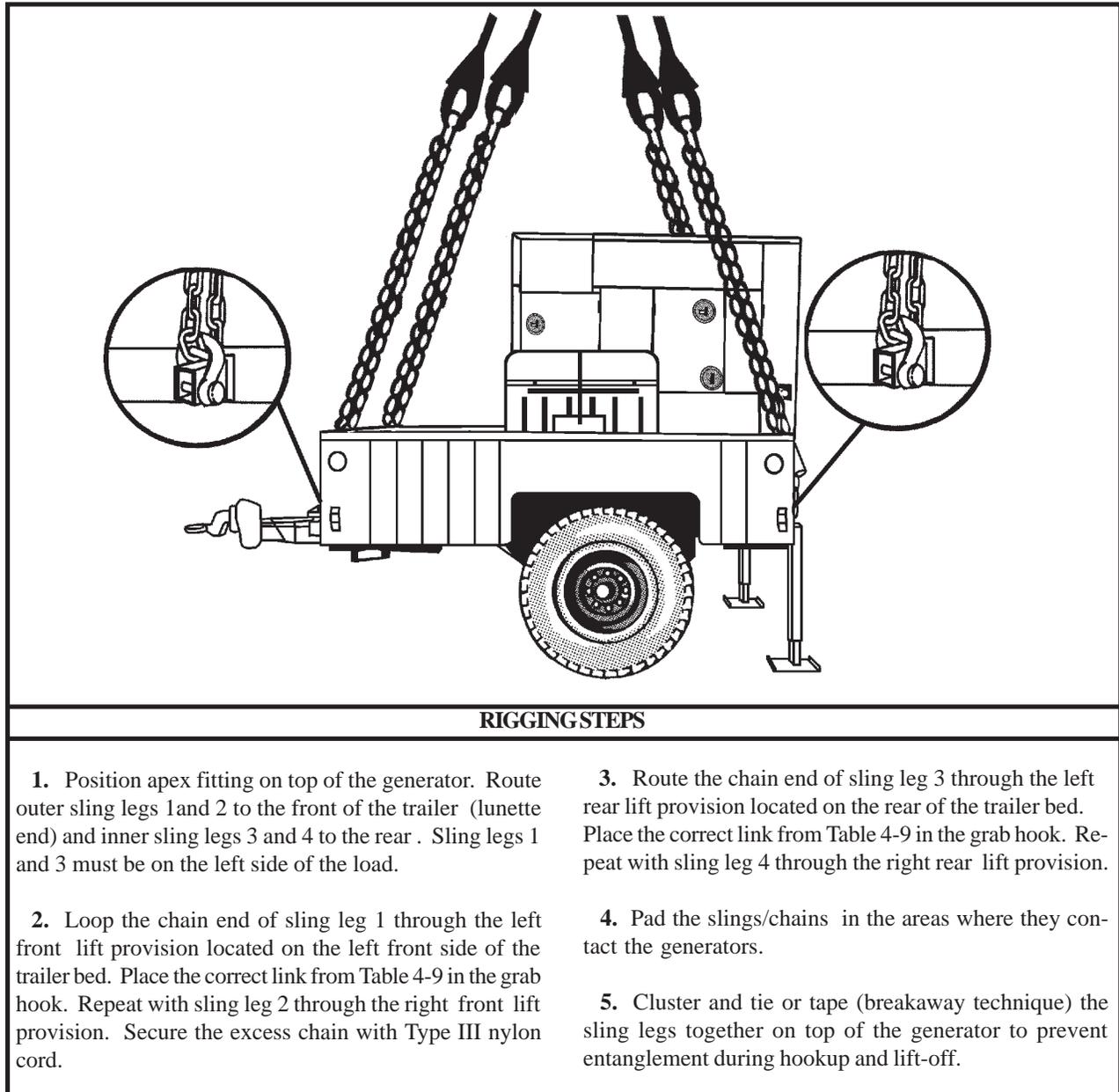


Figure 4-9. High Mobility Trailers (HMT) with Generator (JSTAR)