

CHAPTER 18

SUITABLE SINGLE-POINT RIGGING PROCEDURES FOR ENGINEER EQUIPMENT

18-1. Introduction

This chapter contains rigging procedures for single-point lift of engineer equipment that is suitable 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 suitable loads. The suitable single-point rigging

procedures for engineer equipment is in this section. Paragraphs 18-2 through 18-12 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.

18-2. MRS-100 Wheeled Industrial Tractor

a. Applicability. The following item in Table 18-1 is suitable for sling load by all ARMY helicopters with suitable lift capacity:

Table 18-1. MRS-100 Wheeled Industrial Tractor

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Tractor, Wheeled, Industrial, MRS-100	21,100	25K	53/3	80

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

- (1) Sling set (25,000-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. One person 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) Sectionalize the tractor from the scraper according to the operator's manual.
- (b) Secure the hydraulic lift cylinder in the carrying bracket.
- (c) Secure all caps, lids, and hatches.
- (d) Place the transmission in neutral and set the hand brake.
- (e) Lock the blade in the locked position.

(2) Rigging. Rig the load according to the steps in Figure 18-1.

(3) **Hookup.** The hookup team stands on the driver's seat. 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 moves clear of the load but 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).

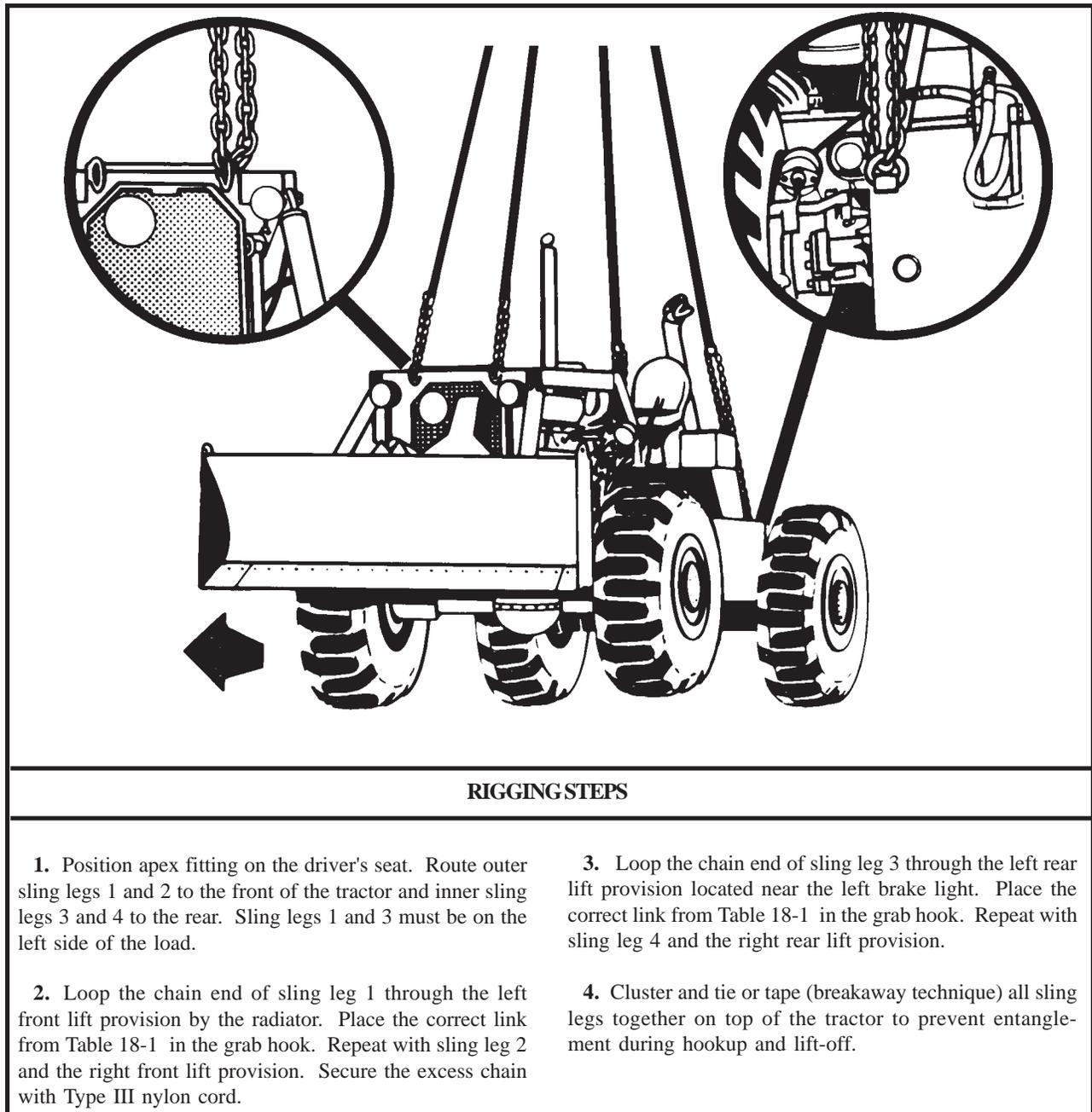


Figure 18-1. MRS-100 Wheeled Industrial Tractor

18-3. M5 8-Foot Aggregate Spreader

a. Applicability. The following item in Table 18-2 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-2. M5 8-Foot Aggregate Spreader

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Spreader, Aggregate, Towed, 8-foot, M5	2,290	10K	3/3	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.

c. Personnel. One person 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 operator's platform and block off plates.

(b) Stow and secure the platform and plates in the spreader.

(2) **Rigging.** Rig the load according to the steps in Figure 18-2.

(3) **Hookup.** The hookup team stands on top of the spreader. 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 moves clear of the load but 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).

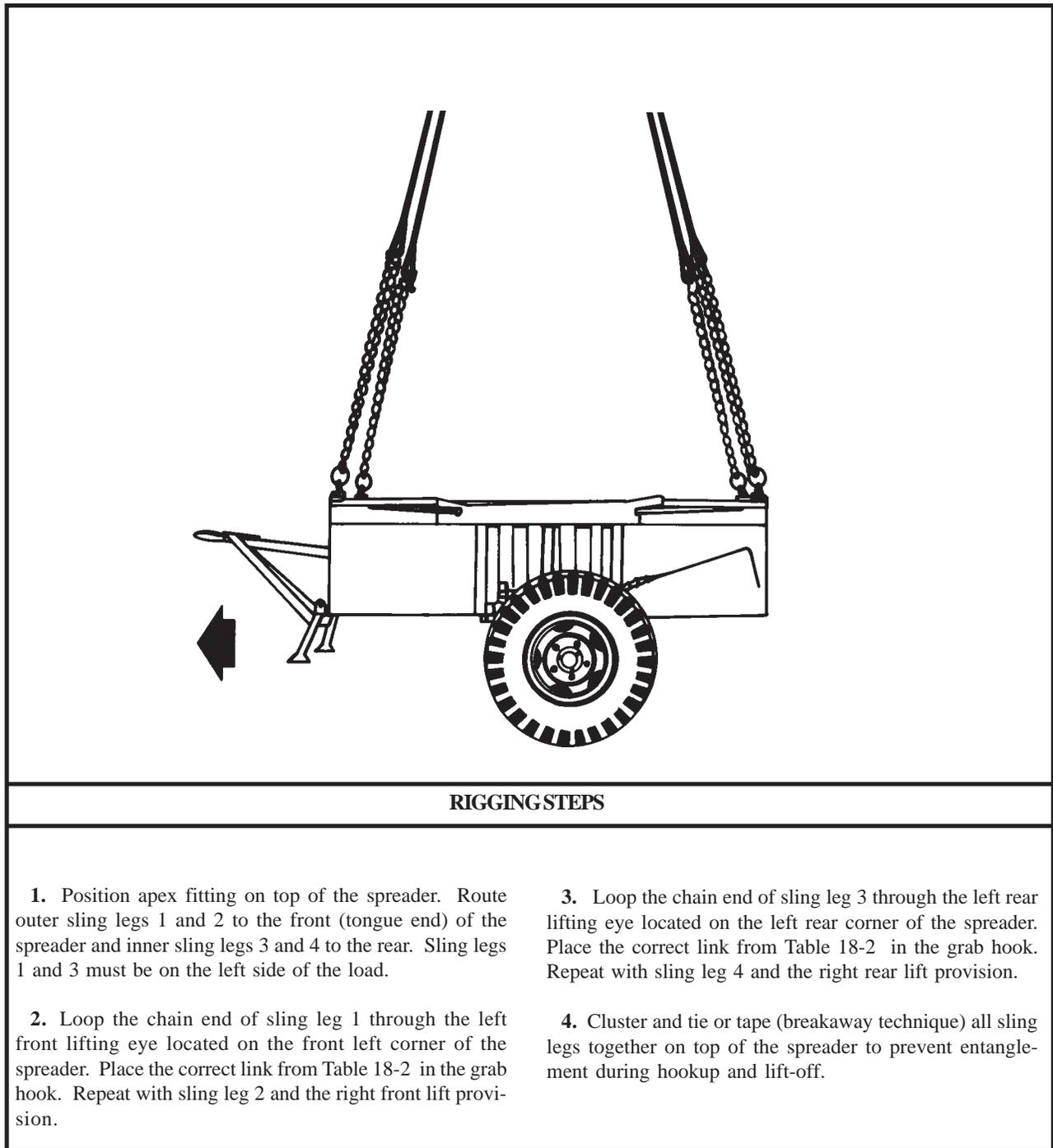


Figure 18-2. M5 8-Foot Aggregate Spreader

18-4. Roller, Towed, Vibrating, 1-Drum, 5-Ton, VR55TM

a. Applicability. The following item in Table 18-3 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-3. Roller, Towed, Vibrating, 1-Drum, 5-Ton, VR55TM

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Roller, Towed, Vibrating, Essick Model, VR55TM, One Drum, 5-ton	3,450	10K	20/90	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.

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:

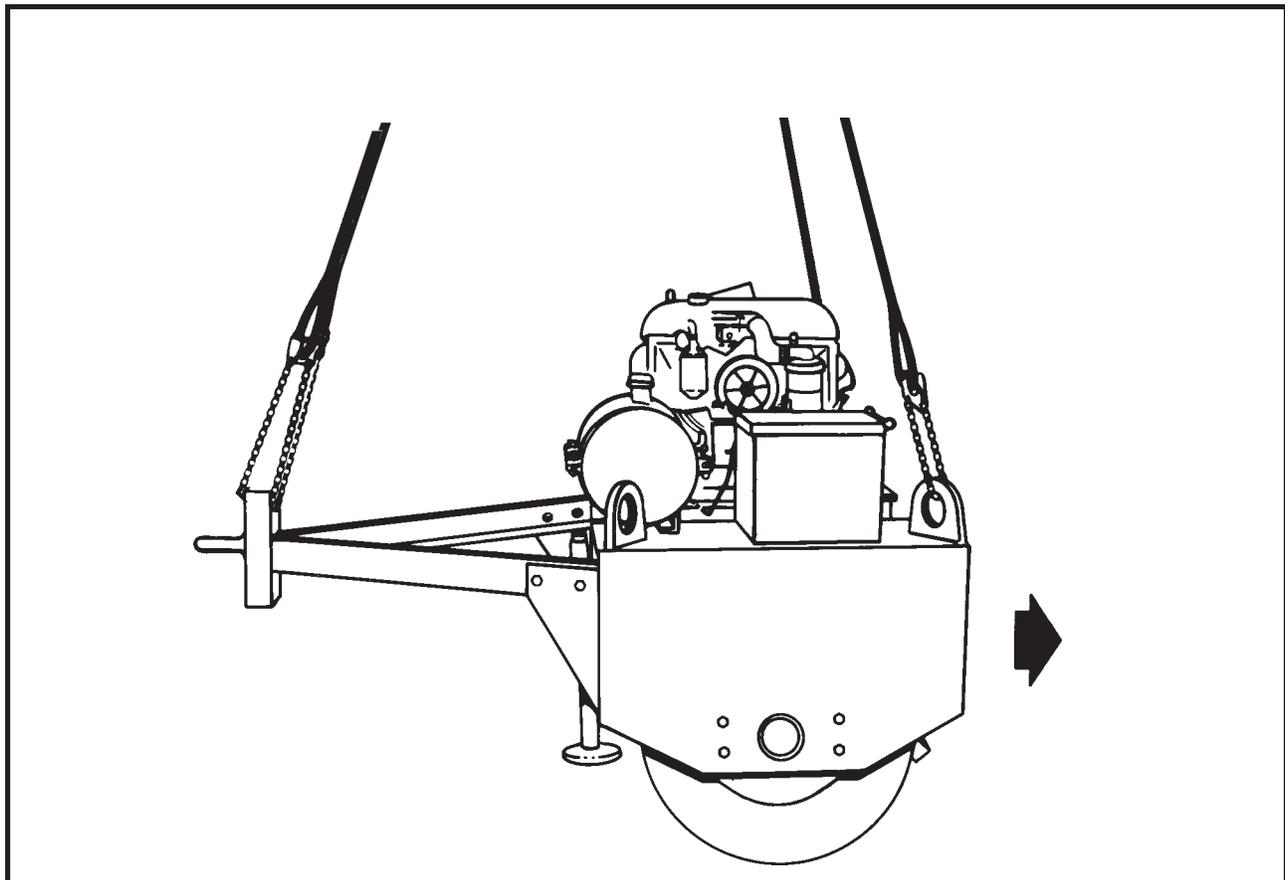
(a) Secure the front and rear support legs in the **DOWN** position with Type III nylon cord.

(b) Secure the battery box cover and engine top cover with Type III nylon cord.

(2) **Rigging.** Rig the load according to the steps in Figure 18-3.

(3) **Hookup.** The hookup team stands on top of the roller. 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 moves clear of the load but 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 roller. Route outer sling legs 1 and 2 to the front (pintle end) of the roller 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 legs 1 and 2 through the front lifting point on top of the pintle eyelet. Place the correct link from Table 18-3 in the grab hook. Secure the excess chain with Type III nylon cord.

3. Loop the chain end of sling leg 3 through the left rear lift provision located on the left rear corner of the roller. Place the correct link from Table 18-3 in the grab hook. Repeat with sling leg 4 and the right rear lift provision. Secure the excess chain with Type III nylon cord.

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

Figure 18-3. Roller, Towed, Vibrating, 1-Drum, 5-Ton, VR55TM

18-5. Roller, Road, Towed, Wheeled, 13-Tire, 9-Ton

a. Applicability. The following item in Table 18-4 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-4. Roller, Road, Towed, Wheeled, 13-Tire, 9-Ton

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Roller, Road, Towed, Wheeled, 13-Tire, 9-Ton, 67B-MIL	3,300	10K	3/3	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) Tie-down, cargo, CGU-1/B.
- (6) Chock blocks (2 each).

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

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

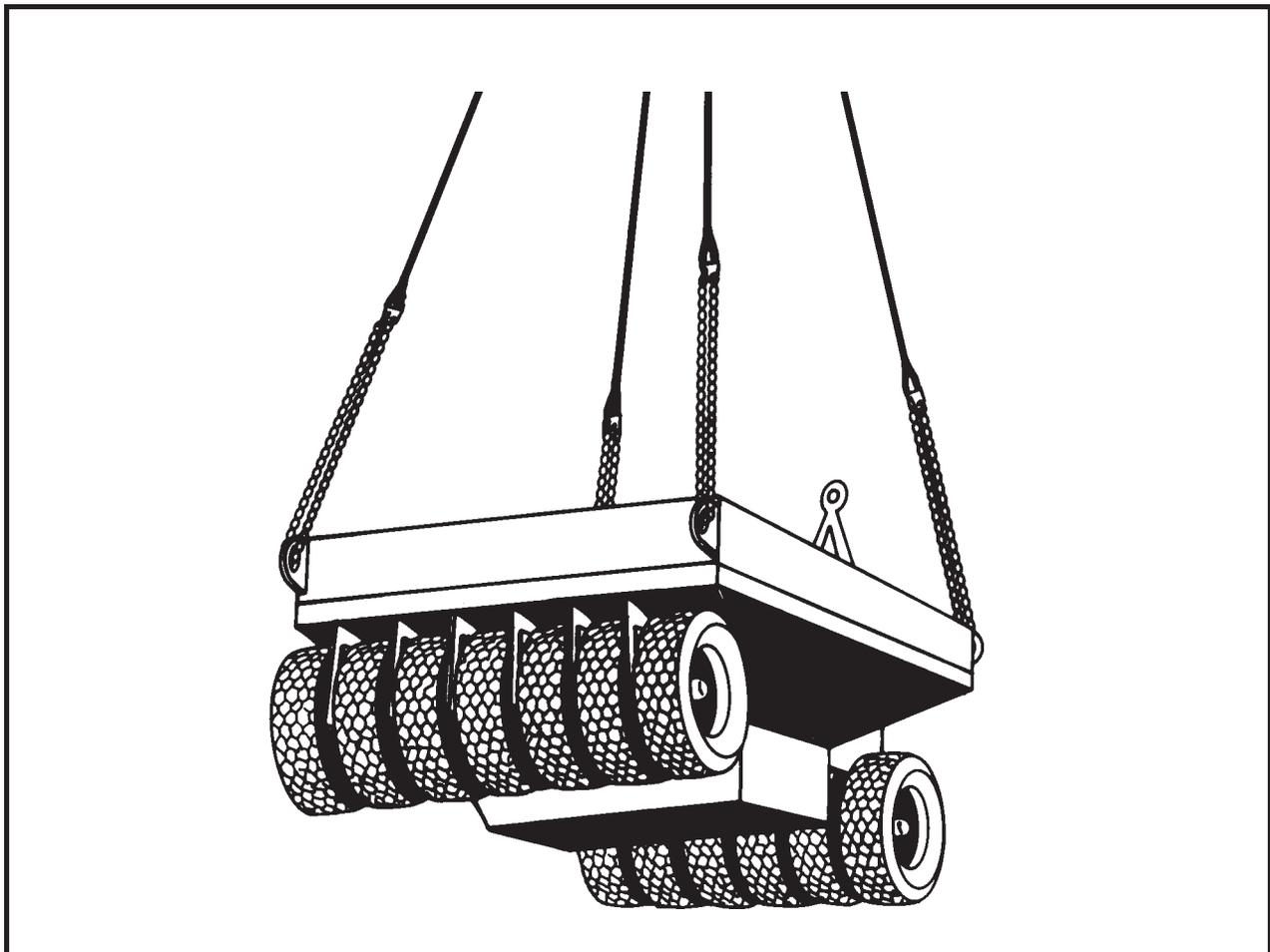
- (1) **Preparation.** Prepare the load using the following

steps:

- (a) Secure the drain plugs with tape.
- (b) Raise the tongue and secure it in place with the CGU-1/B cargo tie-down strap.
- (c) Place the chock blocks by each set of rollers.
- (2) **Rigging.** Rig the load according to the steps in Figure 18-4.

(3) **Hookup.** The hookup team stands on top of the roller. 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 moves clear of the load but 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 roller. Route outer sling legs 1 and 2 to the front of the roller 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 left corner of the roller. Place the correct link from Table 18-4 in the grab hook. Repeat with sling leg 2 and the right front lift provision.

3. Loop the chain end of sling leg 3 through the left rear lift provision located on the left rear corner of the roller. Place the correct link from Table 18-4 in the grab hook. Repeat with sling leg 4 and the right rear lift provision.

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

Figure 18-4. Roller, Road, Towed, Wheeled, 13-Tire, 9-Ton

18-6. Tar Kettles

a. Applicability. The following items in Table 18-5 are suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-5. Tar Kettles

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Kettle, Heating, Bitumen, 165-gallon	1,750	10K	5/20	70
Kettle, Bitumen, Trailer-Mounted, 7ZPSAP	1,900	10K	5/20	70

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) Secure the trailer front support leg in the DOWN

position. Secure all safety chains, cables, and hoses with tape or Type III nylon cord.

- (b) Secure all loose covers with Type III nylon cord.

- (c) Engage the parking brake.

(2) **Rigging.** Rig the load according to the steps in Figure 18-5.

(3) **Hookup.** The hookup team stands on the frame alongside the kettle. 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 moves clear of the load but 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).

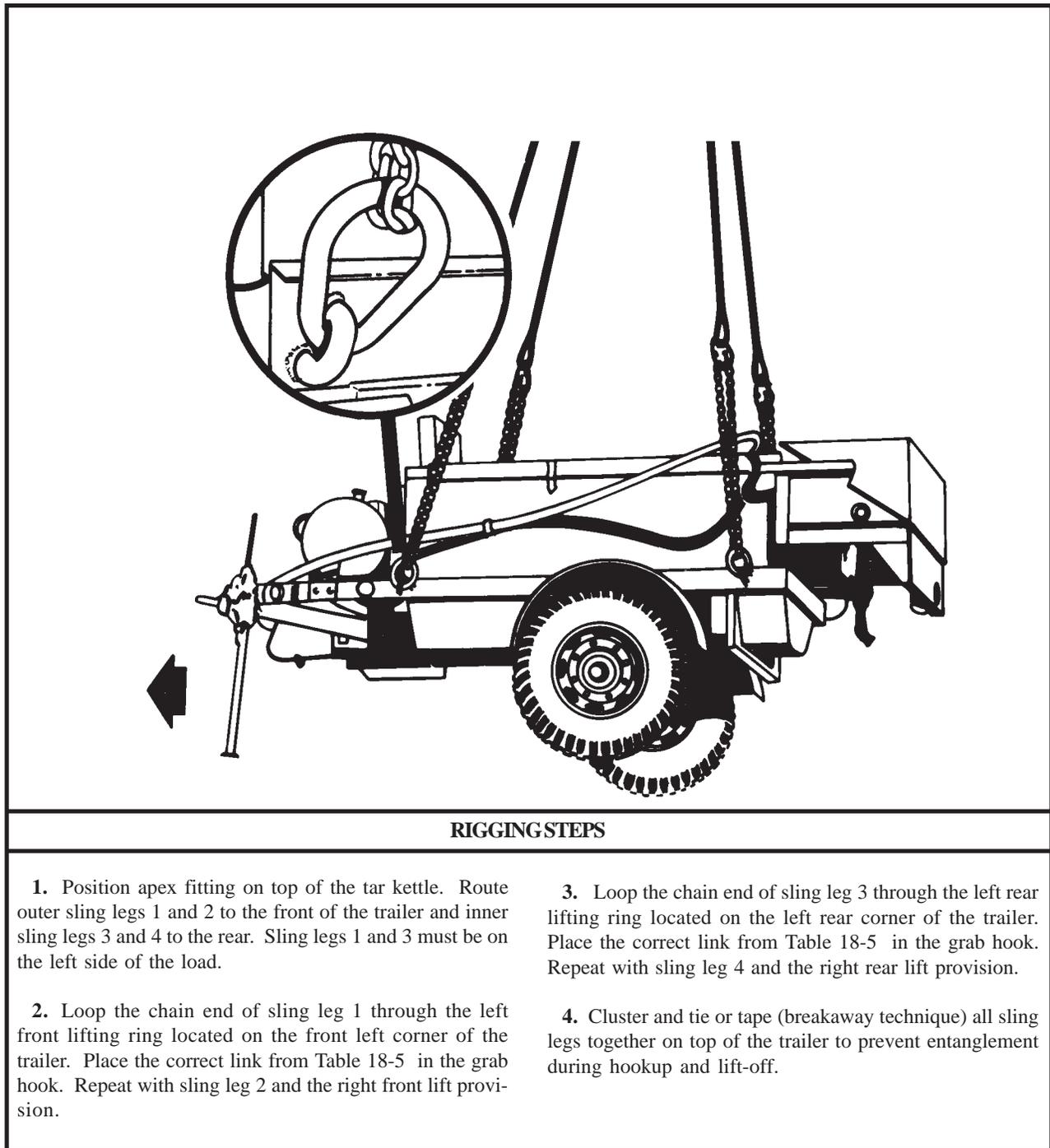


Figure 18-5. Tar Kettles

18-7. 16SM Concrete Mixer

a. Applicability. The following item in Table 18-6 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-6. 16SM Concrete Mixer

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Mixer, Concrete, Trailer-Mounted, 16SM	6,040	10K	3/3	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) Chock blocks, 6- x 6- x 24-inch (4 each).
- (6) Tie-down, 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:

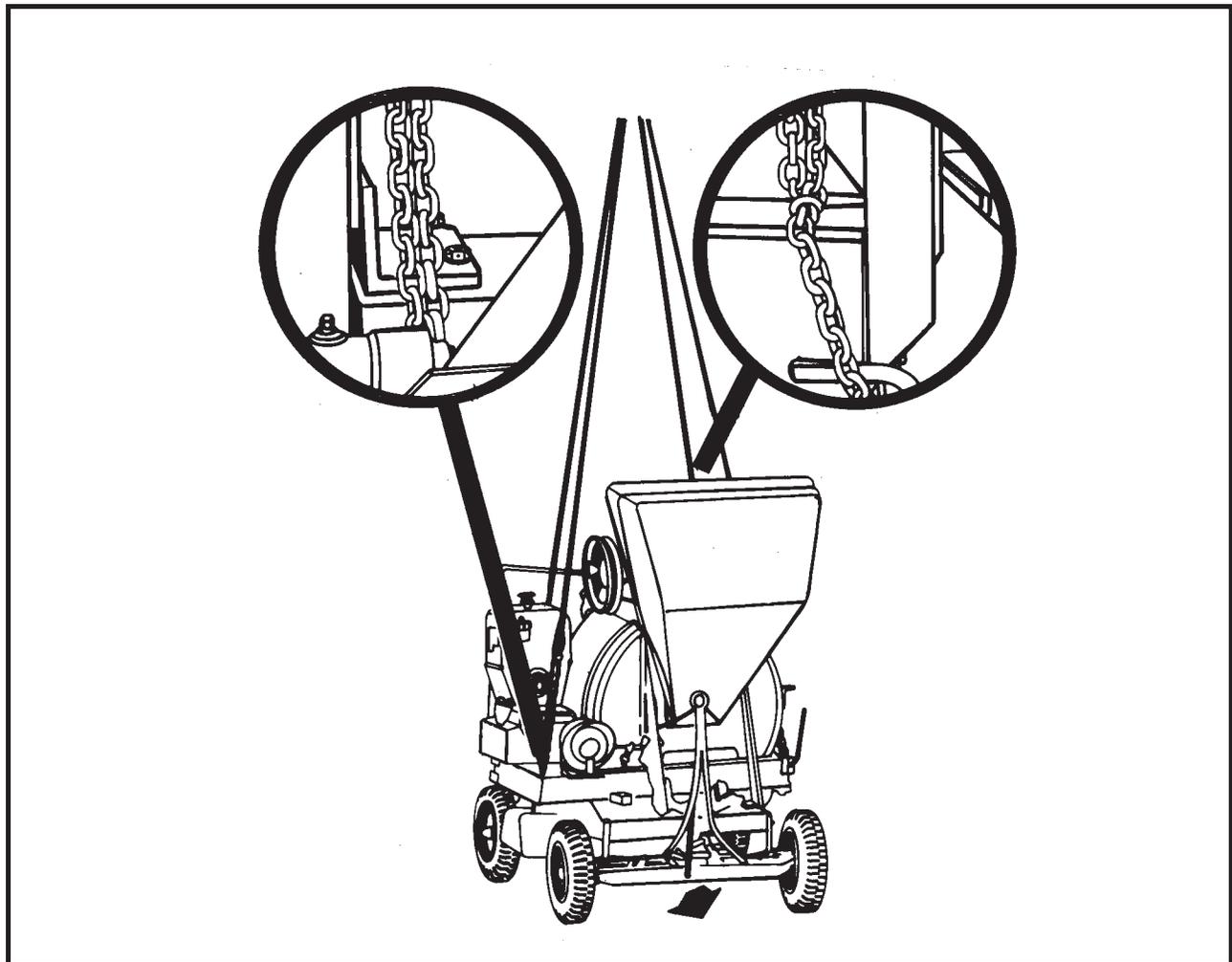
- (1) **Preparation.** Prepare the load using the following

steps:

- (a) Place the chock blocks to the inside of each wheel.
- (b) Secure the tongue in the raised position using the CGU-1/B cargo tie-down strap.
- (c) Secure the scoop elevating wheel with the scoop in the raised position with rope or Type III nylon cord.
- (2) **Rigging.** Rig the load according to the steps in Figure 18-6.

(3) **Hookup.** The hookup team stands on top of the mixer. 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 moves clear of the load but 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 mixer. Route outer sling legs 1 and 2 to the front (tongue end) of the mixer 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 lifting ring located on the front left corner of the trailer frame near the left front wheel. Place the correct link from Table 18-6 in the grab hook. Repeat with sling leg 2 and the right front lift provision.

3. Route sling leg 3 inside the scoop elevating wheel

and loop the chain end through the left rear lifting ring located on the left rear corner of the trailer frame near the left rear wheel. Place the correct link from Table 18-6 in the grab hook.

4. Route sling leg 4 inside the fan belt housing and loop the chain end through the right rear lifting ring on the trailer frame near the right rear wheel. Place the correct link from Table 18-6 in the grab hook.

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

Figure 18-6. 16SM Concrete Mixer

18-8. Road Sweeper, Towed

a. Applicability. The following item in Table 18-7 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-7. Road Sweeper, Towed

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Sweeper, Rotary Towed, with 150-Gallon Water Tank Sprinkling System	2,120	10K	90/3	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.

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) Rotate the towing bar around and secure it in place to the top horizontal bar. Secure safety chains in

place with Type III nylon cord.

(b) Rotate the brush to the last locking hole and secure it with the locking pin.

(c) Secure the hydraulic handle in the UP position with Type III nylon cord.

(2) Rigging. Rig the load according to the steps in Figure 18-7.

(3) Hookup. The hookup team stands on the frame next to the engine. 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 moves clear of the load but 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).

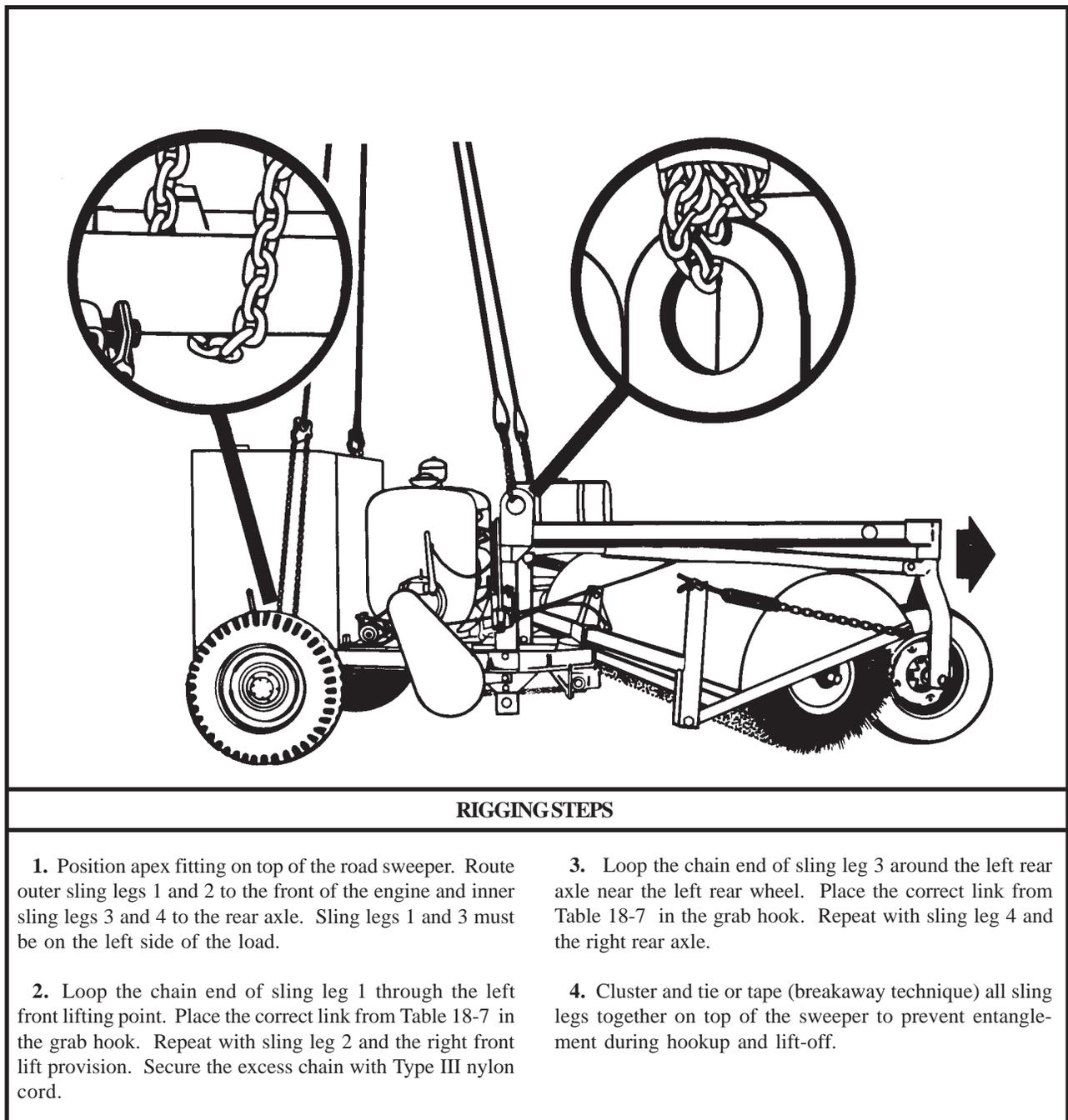


Figure 18-7. Road Sweeper, Towed

18-9. Sheepsfoot Roller, Two-Drum, MD-96

a. Applicability. The following item in Table 18-8 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-8. Sheepsfoot Roller, Two-Drum, MD-96

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Roller, Towed, Sheepsfoot, Two-Drum, MD-96	7,500	10K	3/3	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) Chain assembly (2 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) Wrap a chain four or five times around the two

lower tie-down points aft of the inner sections of the drums and engage hook in the chain end to prevent the two drum sections from pivoting upwards. Secure the hook with tape or Type III nylon cord so the hook will not disengage.

(b) Repeat using the other chain on the two forward lower tie-down points.

(2) **Rigging.** Rig the load according to the steps in Figure 18-8.

(3) **Hookup.** The hookup team stands beside the roller. 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 moves clear of the load but 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).

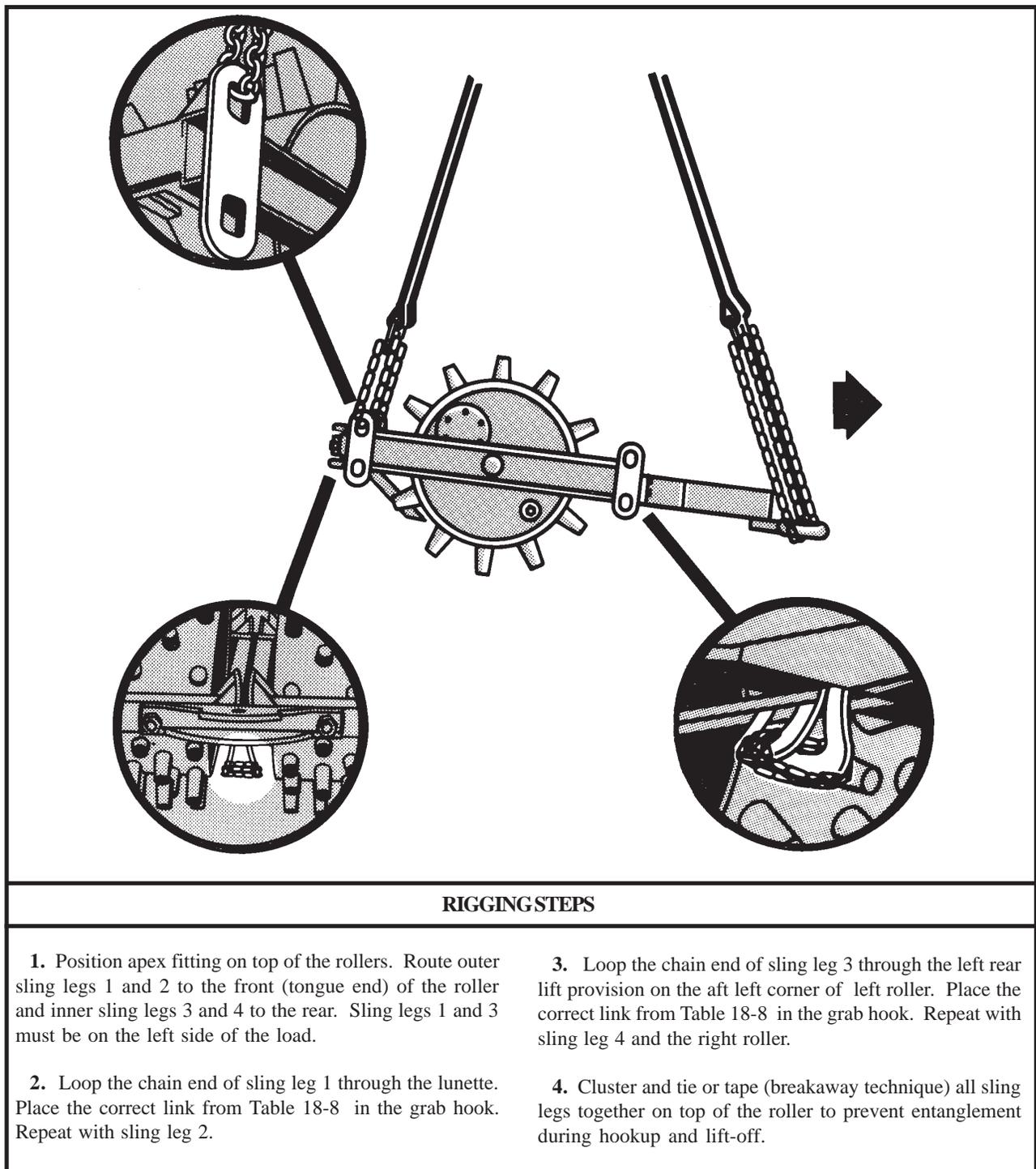


Figure 18-8. Sheepsfoot Roller, Two-Drum, MD-96

18-10. Model 1150 Full Tracked Tractor

a. Applicability. The following items in Table 18-9 are suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-9. Model 1150 Full Tracked Tractor

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Tractor, Full-Tracked, Case Model 1150 without Roll Over Protection System	21,930	25K	3/3	90
Tractor, Full-Tracked, Case Model 1150 without Blade	18,740	25K	3/23	90
Blade	N/A	10K	3/3	90

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

- (1) Sling set (25,000-pound capacity).
- (2) Sling set (10,000-pound capacity) (2 legs only).
- (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) Two protective plugs for hydraulic lines, if sectionalizing the tractor.

c. Personnel. One person can rig each load in 5 minutes. Two persons can remove ROPS and sectionalize the tractor and blade in 2 hours.

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

- (1) **Preparation.** Prepare the load using the following

steps:

(a) Sectionalize the load, if required, according to the operator's manual. Install protective caps over the hoses and install trunnion caps securely.

(b) Place the transmission in neutral.

(2) **Rigging.** Rig the load according to the steps in Figure 18-9.

(3) **Hookup.** The hookup team stands on the driver's seat or beside the blade assembly. 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 moves clear of the load but 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).

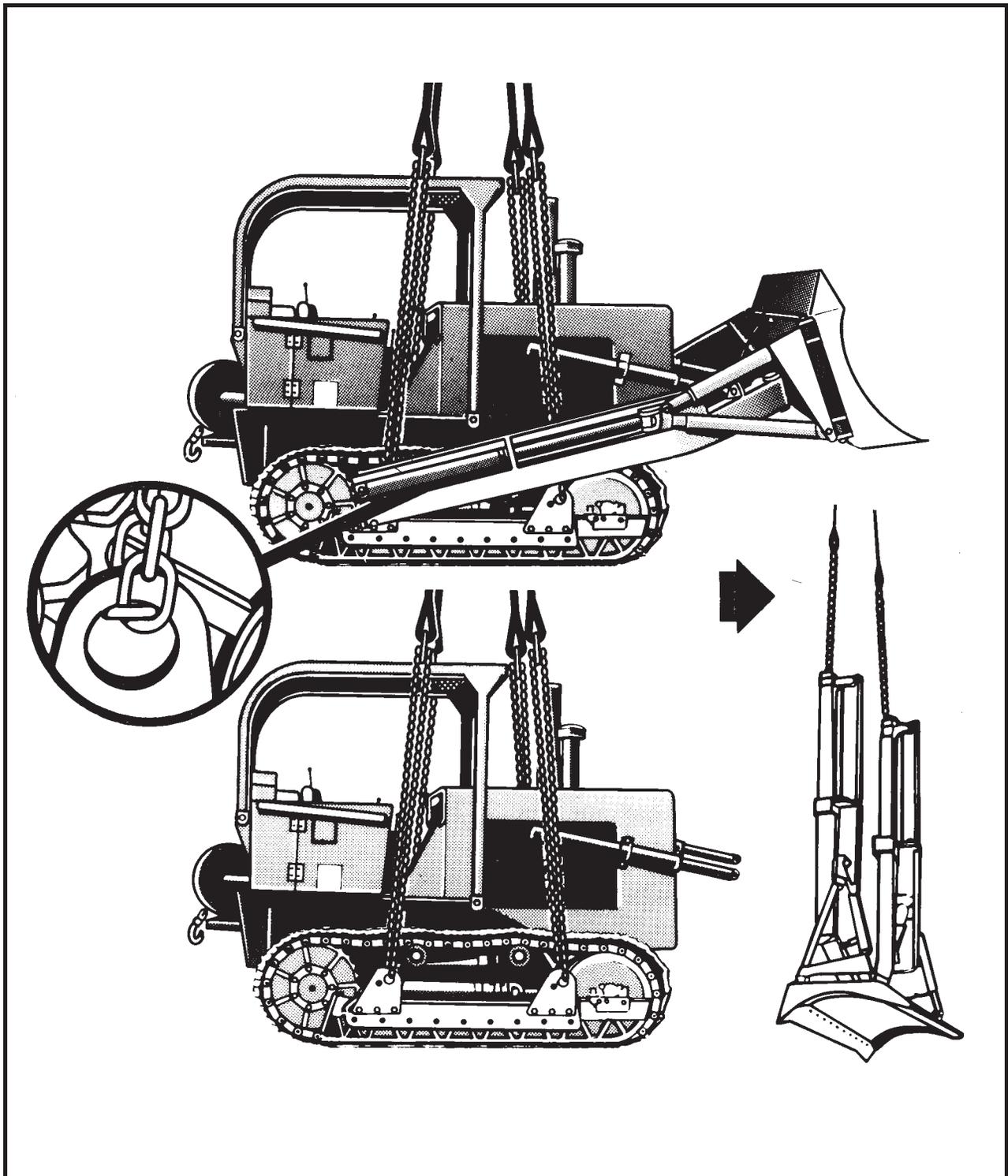


Figure 18-9. Model 1150 Full Tracked Tractor

RIGGING STEPS FOR TRACTOR	RIGGING STEPS FOR BLADE
<ol style="list-style-type: none">1. Position apex fitting on top of the center of the tractor. Route outer sling legs 1 and 2 to the front of the tractor 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 by the front idler. Place the correct link from Table 18-9 in the grab hook. Repeat with sling leg 2 and the right front lift provision.3. Loop the chain end of sling leg 3 through the left rear lift provision located outboard of the drive sprocket. Place the correct link from Table 18-9 in the grab hook. Repeat with sling leg 4 and the right lift provision.4. Cluster and tie or tape (breakaway technique) all sling legs together on top of the tractor to prevent entanglement during hookup and lift-off.	<ol style="list-style-type: none">1. Position apex fitting between the trunnion arms.2. Loop the chain end of the left sling leg through the hole in the left trunnion cap. Place the correct link from Table 18-9 in the grab hook.3. Loop the chain end of the right sling leg through the hole in the right trunnion cap. Place the correct link from Table 18-9 in the grab hook.4. Cluster and tie or tape (breakaway technique) all sling legs together on top of the tractor to prevent entanglement during hookup and lift-off.

Figure 18-9. Model 1150 Full Tracked Tractor (continued)

18-11. M4K 4000-Pound Forklift

a. Applicability. The following item in Table 18-10 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-10. M4K 4000-Pound Forklift

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Forklift, Rough Terrain, 4000 Pound M4K	9,725	10K	25/3	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, 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) Insert the locking pin or bolt and nut to prevent the front and rear ends from pivoting.

(b) Secure the steering wheel with Type III nylon cord. Engage the hand brake.

(c) Ensure the fuel tank is less than 3/4 full.

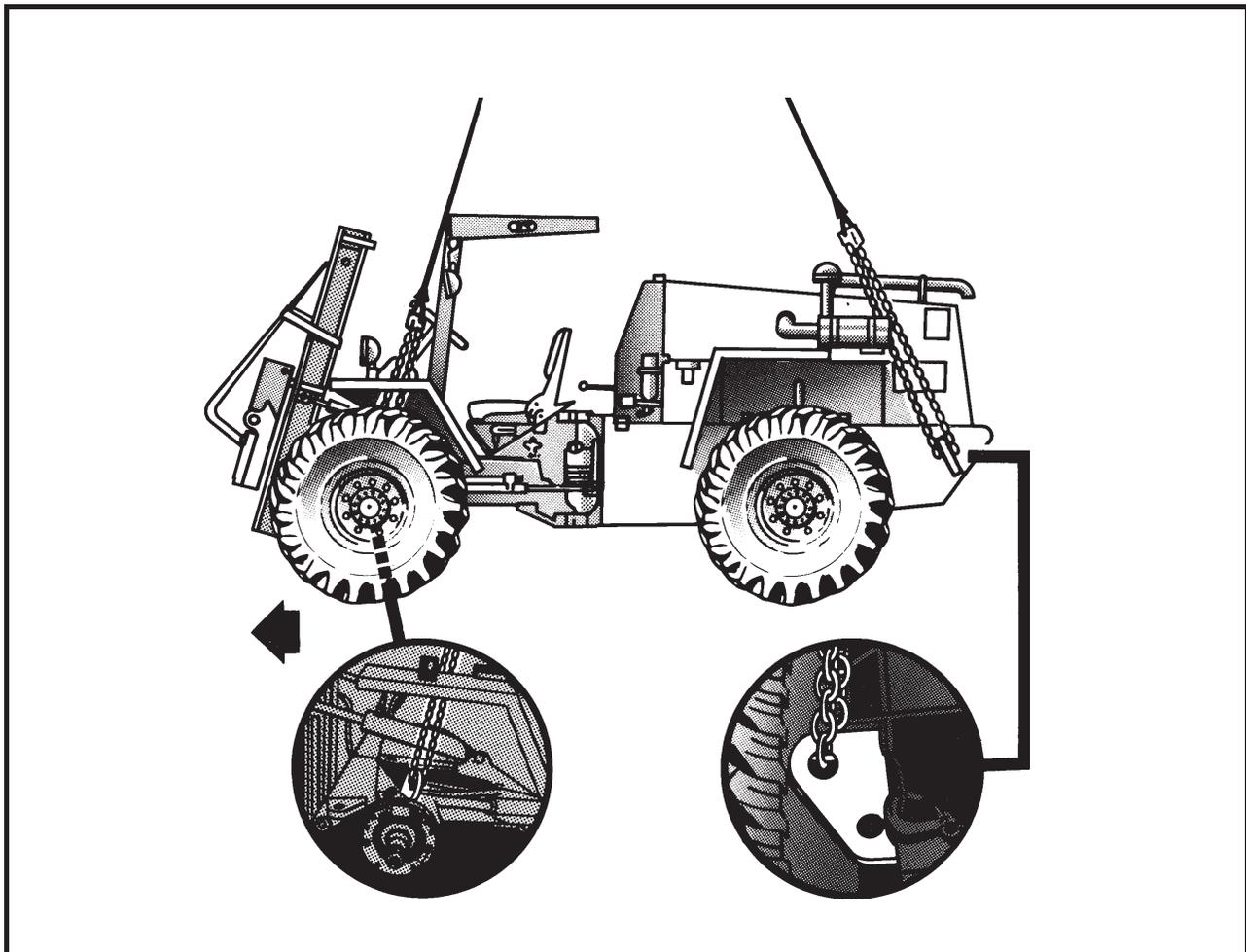
(d) Pad the forward edge of the roll over protection system (ROPS). Secure the padding with tape or Type III nylon cord.

(e) Raise the fork tines approximately 1 foot above the ground. Lift the ends of the fork tines by hand to point upward and secure the fork tines to the lift cylinder frame using the tie-down strap.

(2) **Rigging.** Rig the load according to the steps in Figure 18-10.

(3) **Hookup.** The hookup team stands on top of the engine deck. 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 moves clear of the load but 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 engine hood. Route outer sling legs 1 and 2 to the front of the forklift. Ensure the sling legs are routed behind the lower driving light box beam mounted on the front fenders. Route 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 directly above the forward axle housing between the left front tire and the hydraulic cylinder. Place the correct link from Table 18-10 in the grab hook. Repeat with sling leg 2 and the right front lift provision. Secure the excess chain with Type III nylon cord.

3. Loop the chain end of sling leg 3 through the top hole in the left rear lift provision. Place the correct link from Table 18-10 in the grab hook. Repeat with sling leg 4 and the right rear lift provision.

4. Pull the aft sling legs together on top of the engine compartment and tie or tape (breakaway technique) the grab hooks together.

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

Figure 18-10. M4K 4000-Pound Forklift

18-12. Floodlight Set, Trailer-Mounted

a. Applicability. The following item in Table 18-11 is suitable for sling load by all **ARMY** helicopters with suitable lift capacity:

Table 18-11. Floodlight Set, Trailer-Mounted

NOMENCLATURE	MAX WEIGHT (POUNDS)	SLING SET	LINK COUNT FRONT/REAR	RECOMMENDED AIRSPEED (KNOTS)
Floodlight Set, M762 Trailer-Mounted, Model No. HLT-3KW-M.1	2,300	10K	40/100	85

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) Tie-down strap, cargo, CGU-1/B (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) Ensure the generator set is secured in place with the security bolts. Use the CGU-1/B tie-down straps if necessary.

(b) Secure the mast section and lights in place with Type III nylon cord.

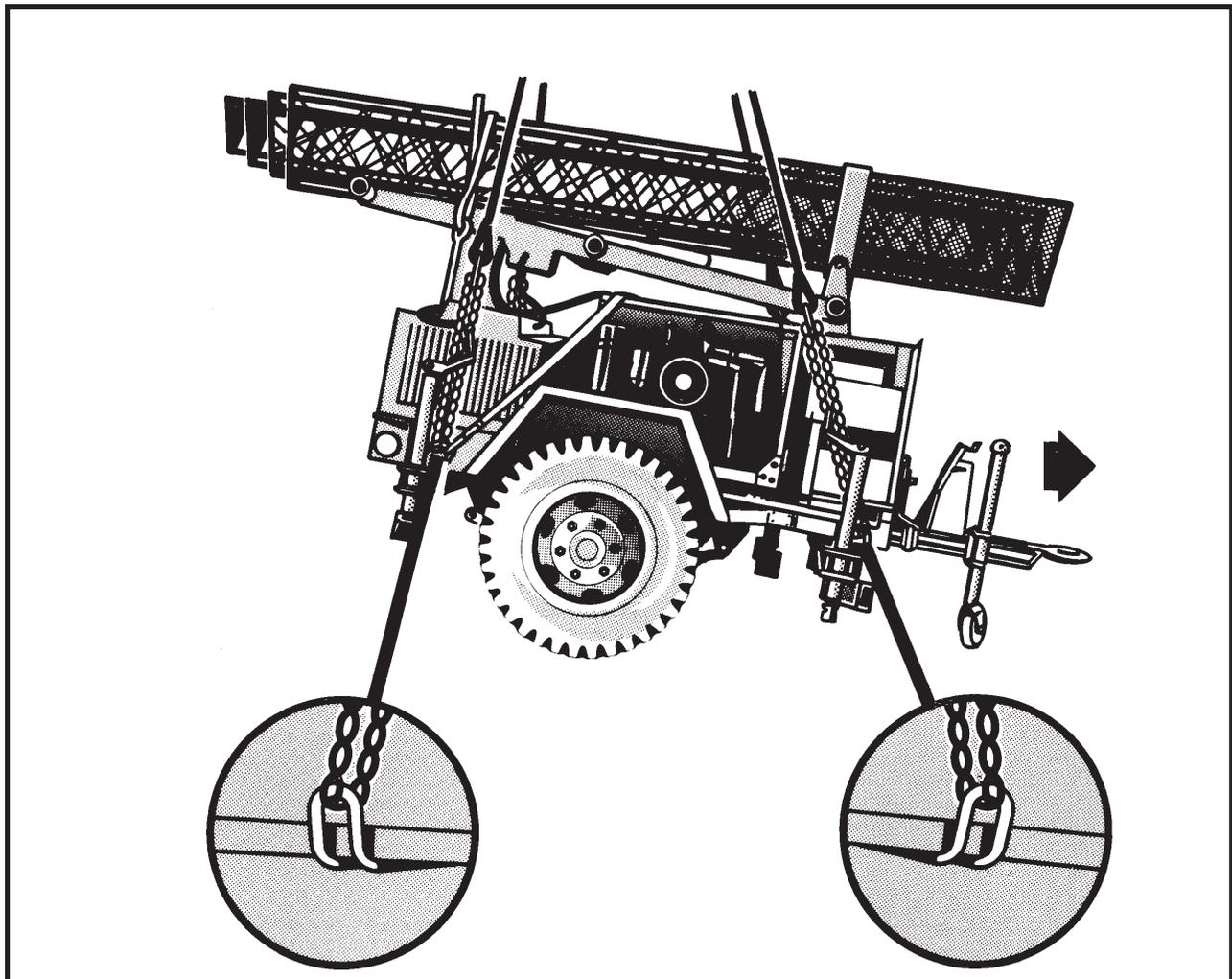
(c) Secure all cables, hoses, and chains to the trailer tongue with tape or Type III nylon cord.

(d) Engage the parking brake. Raise all the leveling legs to the full up position. Secure the trailer tongue leg in the down position.

(2) Rigging. Rig the load according to the steps in Figure 18-11.

(3) Hookup. The hookup team stands alongside the load. 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 moves clear of the load but 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 floodlight set. Route outer sling legs 1 and 2 to the front of the trailer 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. Place the correct link from Table 18-11 in the grab hook. Repeat with sling leg 2 and the right front lift provision. Secure the excess chain with Type III nylon cord.

3. Loop the chain end of sling leg 3 through the left rear lift provision. Place the correct link from Table 18-11 in the grab hook. Repeat with sling leg 4 and the right rear lift provision. Secure the excess chain with Type III nylon cord.

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

Figure 18-11. Floodlight Set, Trailer-Mounted

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