

SERVICE REPAIR

MANUAL

Hyster A917 (H800-900-1050HD,
H800-900-970-1050HDS) Forklift Service Repair
Manual

HYSTER

ASSEMBLY GUIDE

H40.00-48.00XM-12

(H800-1050HD/HDS) [A917];

H36XMS-12, H40XM-12, H44XM-12, H48XM-12

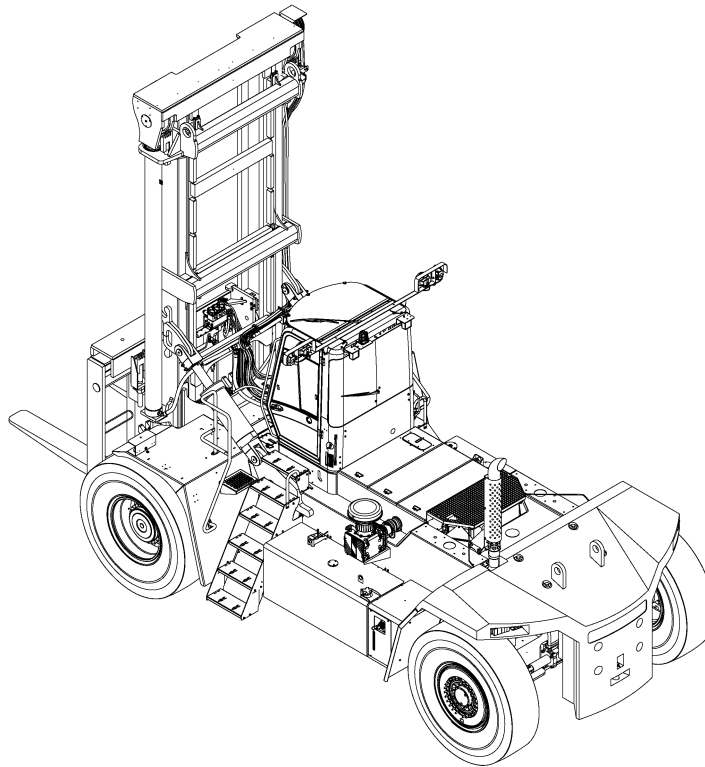
(H800HD, H1050HD) [B917];

H40XM-12, H44XM-12, H48XM-12, H36XMS-12,

H40XMS-12, H44XMS-12, H48XMS-12

(H800HDS, H900HDS, H970HDS, H1050HDS,

H900HD, H970HD, H1050HD) [C917]



HYSTER

SAFETY PRECAUTIONS

MAINTENANCE AND REPAIR

- The Service Manuals are updated on a regular basis, but may not reflect recent design changes to the product. Updated technical service information may be available from your local authorized Hyster® dealer. Service Manuals provide general guidelines for maintenance and service and are intended for use by trained and experienced technicians. Failure to properly maintain equipment or to follow instructions contained in the Service Manual could result in damage to the products, personal injury, property damage or death.
- When lifting parts or assemblies, make sure all slings, chains, or cables are correctly fastened, and that the load being lifted is balanced. Make sure the crane, cables, and chains have the capacity to support the weight of the load.
- Do not lift heavy parts by hand, use a lifting mechanism.
- Wear safety glasses.
- DISCONNECT THE BATTERY CONNECTOR before doing any maintenance or repair on electric lift trucks. Disconnect the battery ground cable on internal combustion lift trucks.
- Always use correct blocks to prevent the unit from rolling or falling. See HOW TO PUT THE LIFT TRUCK ON BLOCKS in the **Operating Manual** or the **Periodic Maintenance** section.
- Keep the unit clean and the working area clean and orderly.
- Use the correct tools for the job.
- Keep the tools clean and in good condition.
- Always use **HYSTER APPROVED** parts when making repairs. Replacement parts must meet or exceed the specifications of the original equipment manufacturer.
- Make sure all nuts, bolts, snap rings, and other fastening devices are removed before using force to remove parts.
- Always fasten a DO NOT OPERATE tag to the controls of the unit when making repairs, or if the unit needs repairs.
- Be sure to follow the **WARNING** and **CAUTION** notes in the instructions.
- Gasoline, Liquid Petroleum Gas (LPG), Compressed Natural Gas (CNG), and Diesel fuel are flammable. Be sure to follow the necessary safety precautions when handling these fuels and when working on these fuel systems.
- Batteries generate flammable gas when they are being charged. Keep fire and sparks away from the area. Make sure the area is well ventilated.

NOTE: The following symbols and words indicate safety information in this manual:



WARNING

Indicates a hazardous situation which, if not avoided, could result in death or serious injury.



CAUTION

Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury and property damage.

On the lift truck, the **WARNING** symbol and word are on orange background. The **CAUTION** symbol and word are on yellow background.

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This section is for the following models:

H40.00-48.00XM-12 (H800-1050HD/HDS) [A917];

H36XMS-12, H40XM-12, H44XM-12, H48XM-12 (H800HD, H1050HD) [B917];

H40XM-12, H44XM-12, H48XM-12, H36XMS-12, H40XMS-12, H44XMS-12,

H48XMS-12 (H800HDS, H900HDS, H970HDS, H1050HDS, H900HD, H970HD,

H1050HD) [C917]

**Thanks very much for your reading,
Want to get more information,
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manual**

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General

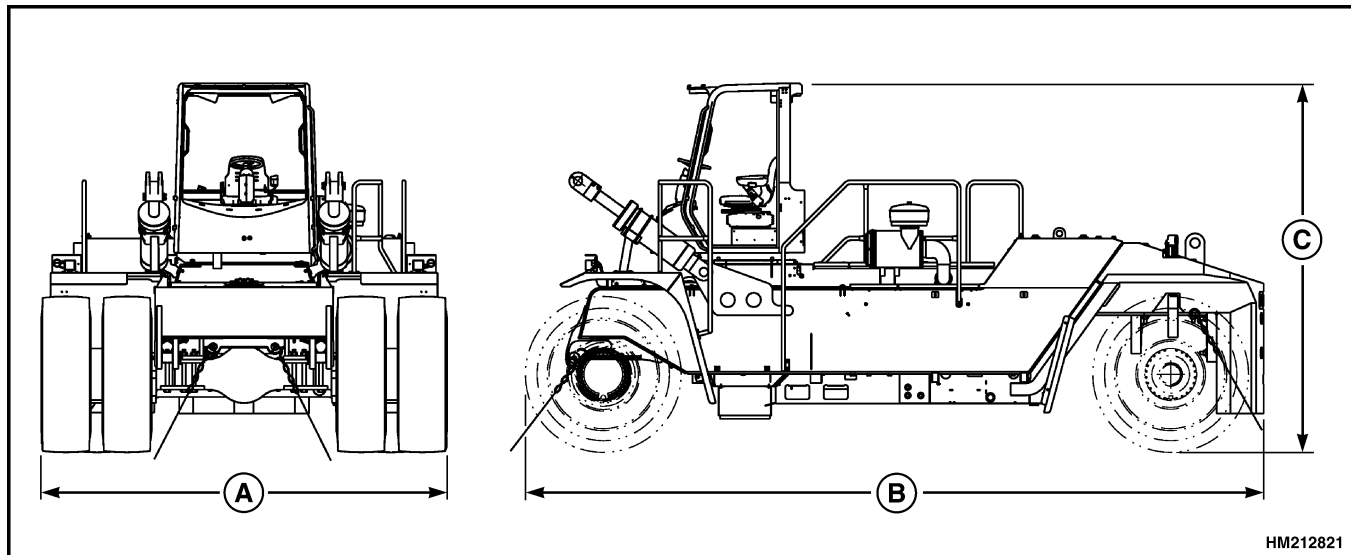


WARNING

Read all the instructions contained in this manual before starting any work on the unit. Also read all procedures contained in the Operating Manual before operating the truck. Make sure to check all fluid levels and tire pressures before moving the truck from the trailer.

This manual contains the information that is required for transportation and reassembly of truck series A917, B917, and C917. The information covers each component that may have been disassembled for transportation purposes. Select the appropriate assembly procedures accordingly.

Weight and Dimensions



A. WIDTH
B. LENGTH

C. HEIGHT

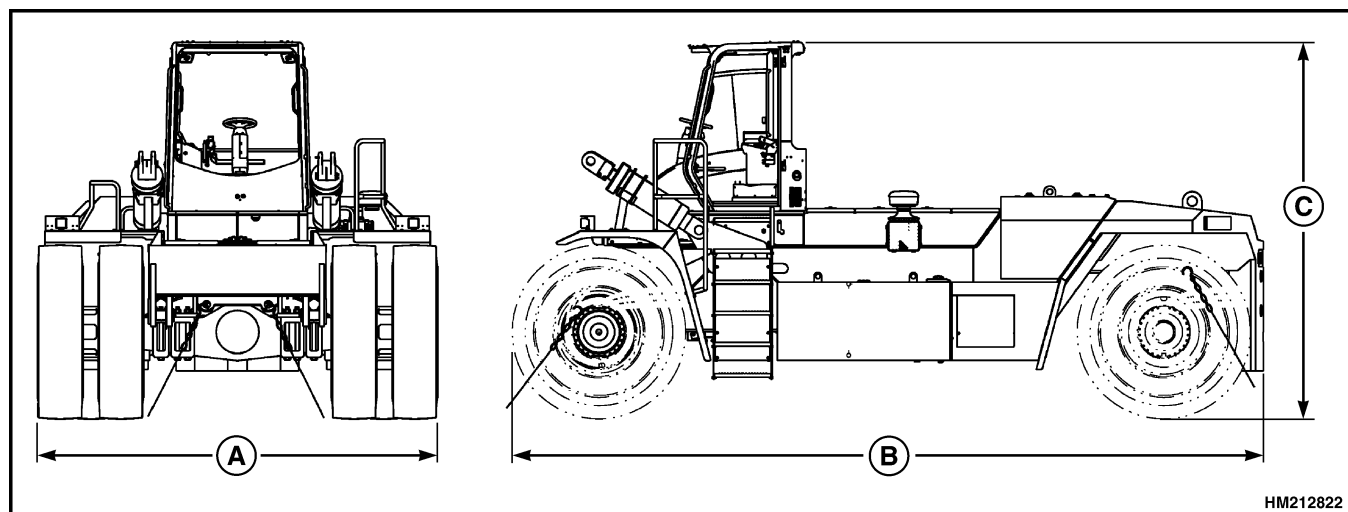
Figure 1. Basic Truck A917 Width, Length, and Height

Table 1. Basic Truck A917

Model	Width	Length	Height	Weight	
				MIN	MAX
H36.00XM-12/ H800HD	4,230 mm (127 in.)	7,180 mm (282.6 in.)	3,845 mm (151.3 in.)	36,900 kg (81,350 lb)	39,750 kg (87,633 lb)
H40.00XMS-12/ H900HD	4,230 mm (127 in.)	7,180 mm (282.6 in.)	3,845 mm (151.3 in.)	40,000 kg (88,184 lb)	43,000 kg (94,798 lb)
H44.00XMS-12/ H970HDS	4,230 mm (127 in.)	7,180 mm (282.6 in.)	3,845 mm (151.3 in.)	41,950 kg (92,483 lb)	44,750 kg (98,656 lb)
H48.00XMS-12/ H1050HDS	4,230 mm (127 in.)	7,180 mm (282.6 in.)	3,845 mm (151.3 in.)	45,000 kg (99,208 lb)	48,050 kg (105,932 lb)
H40.00XM-12	4,230 mm (127 in.)	7,690 mm (302.7 in.)	3,845 mm (151.3 in.)	37,400 kg (82,452 lb)	40,050 kg (88,295 lb)
H44.00XM-12	4,230 mm (127 in.)	7,690 mm (302.7 in.)	3,845 mm (151.3 in.)	39,550 kg (87,192 lb)	42,250 kg (93,145 lb)
H48.00XM-12/ H1050HD	4,230 mm (127 in.)	7,690 mm (302.7 in.)	3,845 mm (151.3 in.)	41,950 kg (92,483 lb)	44,750 kg (98,656 lb)

NOTE: Height dimension is for trucks with open cab and cab lights removed or fitted upside down.

- Add 43 mm (1.6 in.) to the height for closed cab without airco.
- Add 78 mm (3 in.) to the height for closed cab with airco.
- Add 105 mm (4 in.) when fitted with 18.00×33 tires.



A. WIDTH
B. LENGTH

C. HEIGHT

Figure 2. Basic Truck B917 and C917 Width, Length, and Height

Table 2. Basic Truck B917 and C917

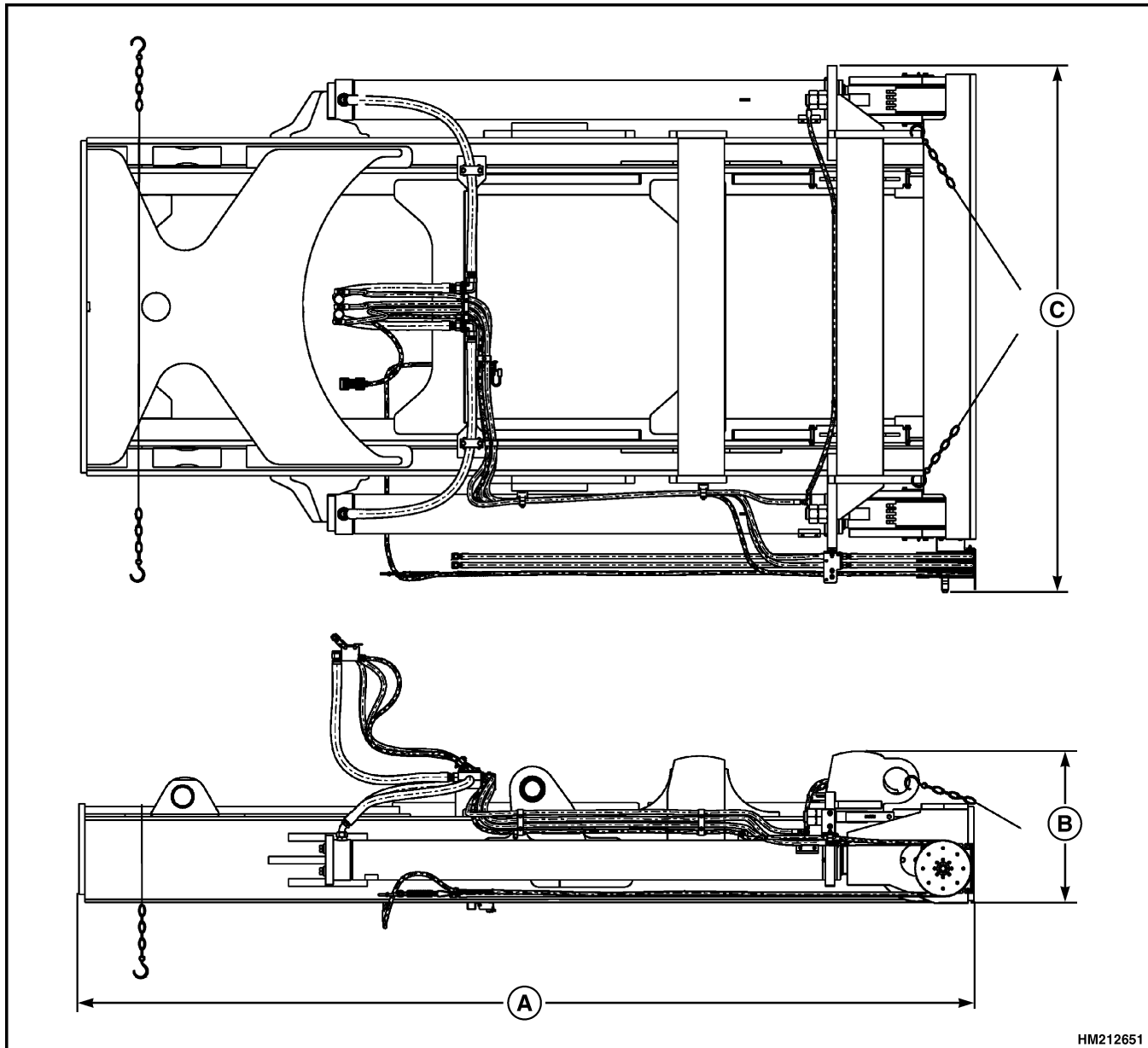
Model	Width	Length	Height	Weight	
				MIN	MAX
H36XMS-12/ H800HDS	4,210 mm (165.7 in.)	7,250 mm (385.4 in.)	3,890 mm (153.1 in.)	36,900 kg (81,350 lb)	39,750 kg (87,633 lb)
H40XMS-12/ H900HDS	4,210 mm (165.7 in.)	7,250 mm (385.4 in.)	3,890 mm (153.1 in.)	40,000 kg (88,184 lb)	43,000 kg (94,798 lb)
H44XMS-12/ H970HDS	4,210 mm (165.7 in.)	7,250 mm (385.4 in.)	3,890 mm (153.1 in.)	41,950 kg (92,483 lb)	44,750 kg (98,656 lb)
H48XMS-12/ H1050HDS	4,210 mm (165.7 in.)	7,250 mm (385.4 in.)	3,890 mm (153.1 in.)	45,000 kg (99,208 lb)	48,050 kg (105,932 lb)
H40XM-12/ H900HD	4,210 mm (165.7 in.)	7,765 mm (305.7 in.)	3,890 mm (153.1 in.)	37,400 kg (82,452 lb)	40,050 kg (88,295 lb)
H44XM-12/ H970HD	4,210 mm (165.7 in.)	7,765 mm (305.7 in.)	3,890 mm (153.1 in.)	39,550 kg (87,192 lb)	42,250 kg (93,145 lb)
H48XM-12/ H1050HD	4,210 mm (165.7 in.)	7,765 mm (305.7 in.)	3,890 mm (153.1 in.)	41,950 kg (92,483 lb)	44,750 kg (98,656 lb)

NOTE: The indicated height dimension is for trucks without airco and with the cab lights removed or fitted upside down.

- Add 35 mm (1.4 in.) to the height for closed cab with airco.
- Add 100 mm (4 in.) to the height when fitted with 18.00×33 tires.

NOTE: The indicated length dimension is for trucks with 18.00 x 25 tires.

- Add 100 mm (4 in.) to the length dimension when fitted with 18.00×33 tires.



A. LENGTH
B. HEIGHT

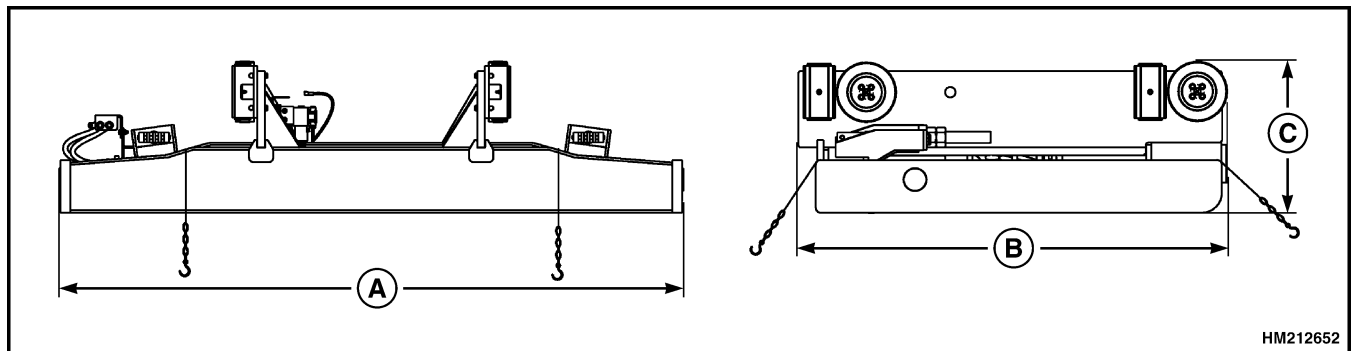
C. WIDTH

Figure 3. Mast Width, Length, and Height

Table 3. Mast

Lift Height	Length	Height	Width	Weight
4,267 mm (167.9 in.)	4,760 mm (187.4 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	9,220 kg (20,326 lb)
7,010 mm (275.9 in.)	6,130 mm (241 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	11,110 kg (24,493 lb)
8,534 mm (335.9 in.)	6,895 mm (271.4 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	12,400 kg (27,337 lb)
9,144 mm (360 in.)	7,200 mm (283.4 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	12,780 kg (28,175 lb)
9,754 mm (384 in.)	7,505 mm (295.4 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	13,220 kg (29,145 lb)
12,650 mm (498 in.)	9,030 mm (355.5 in.)	806 mm (31.7 in.)	2,800 mm (110 in.)	16,200 kg (35,714 lb)

NOTE: Deduct 236 mm (9 in.) from width when hose sheaves are dismounted and secured to the mast.

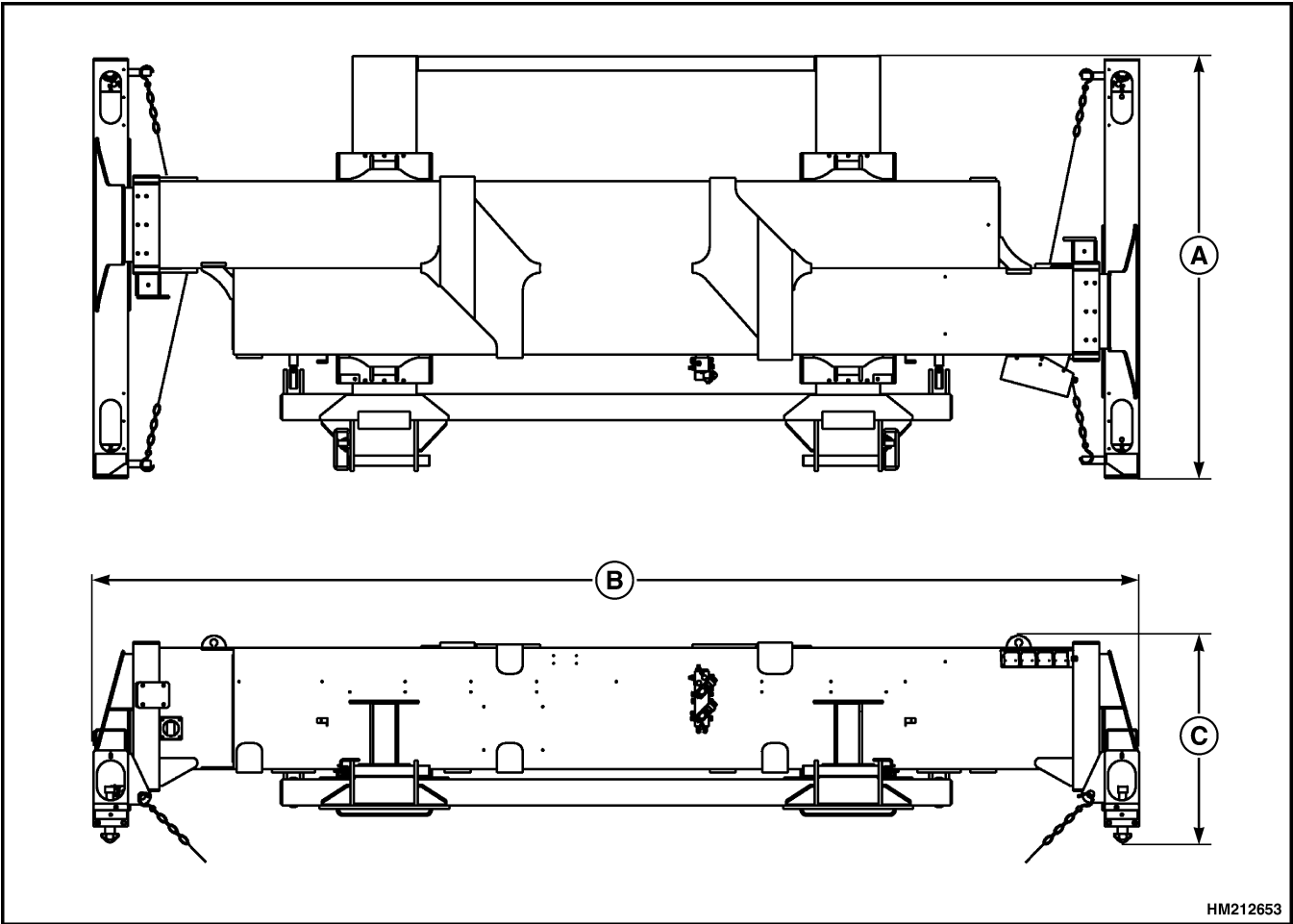


A. LENGTH
B. WIDTH

C. HEIGHT

Figure 4. Carriage Width, Length, and Height**Table 4. Carriage**

Model	Type	Length	Width	Height	Weight
ALL	Standard Carriage	3,165 mm (124.6 in.)	2,175 mm (85.6 in.)	765 mm (30 in.)	3,130 kg (6,900 lb)
36.00-48.00 (800-1050) (18.00X25 Tires)	Side Shift Carriage	3,165 mm (124.6 in.)	2,225 mm (87.5 in.)	840 mm (33 in.)	5,060 kg (11,155 lb)
36.00-48.00 (800-1050) (18.00X33 Tires)	Side Shift Carriage	3,165 mm (124.6 in.)	2,245 mm (88 in.)	945 mm (37 in.)	5,410 kg (11,927 lb)

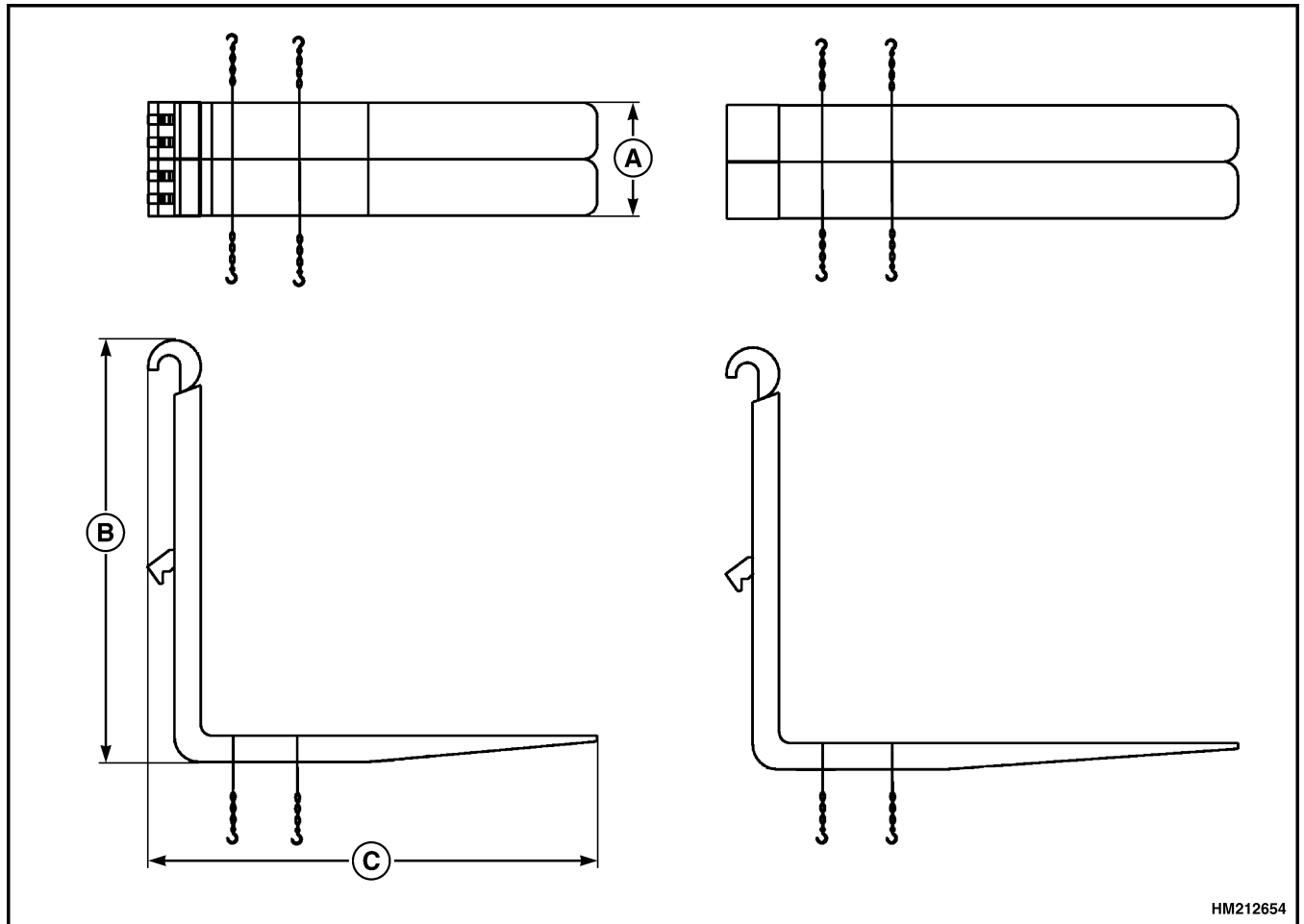


- A. WIDTH
- B. LENGTH
- C. HEIGHT

Figure 5. Container Attachment Width, Length, and Height (optional for A917 and B917)

Table 5. Container Attachment (optional for A917 and B917)

Width	Length	Height	Weight
2,433 mm (95.7 in.)	6,042 mm (237.8 in.)	1,193 mm (46.9 in.)	7,400 kg (16,314 lb)



A. WIDTH
B. HEIGHT

C. LENGTH

Figure 6. Forks Width, Length, and Height

Table 6. Forks

Type	Width	Height	Length	Weight
QD 5.5X12-96	600 mm (23.6 in.)	2,240 mm (88 in.)	2,720 mm (107 in.)	2,680 kg (5,908 lb)
QD 5.5X12-83	600 mm (23.6 in.)	2,240 mm (88 in.)	2,390 mm (94 in.)	2,560 kg (5,643 lb)

Loading Procedures

LOADING TRUCK ON A TRANSPORT



WARNING

Stay a safe distance from the edge of docks, ramps, platforms, and other similar working surfaces. Watch the "tail swing". Remember when traveling in the forward direction and the steering wheel is turned to move the lift truck away from the edge of the dock, the rear will swing toward the edge. This can cause the lift truck to fall off the dock.



WARNING

IF THE LIFT TRUCK FALLS OFF THE DOCK, DO NOT JUMP OFF! HOLD FIRMLY TO STEERING WHEEL, BRACE YOUR FEET, AND LEAN FORWARD AND AWAY FROM THE POINT OF IMPACT.

Before the lift truck is moved on transport, check the selected route to make sure there is enough clearance for the lift truck as loaded on the transport vehicle. Bridges, overpasses, power lines, and natural barriers can prevent clearance. Removal of the mast can be necessary.

If a trailer is the method of transportation, use blocks in front and back of the trailer tires to prevent movement of the trailer when the lift truck is loaded and unloaded. If a loading ramp is used, make sure that the ramp is the correct design and capacity.

A crane can only be used to load or unload the lift truck if the lift truck is equipped with lifting eyes. Otherwise, the lift truck must be driven on or off the transport.

LOADING DISASSEMBLED COMPONENTS

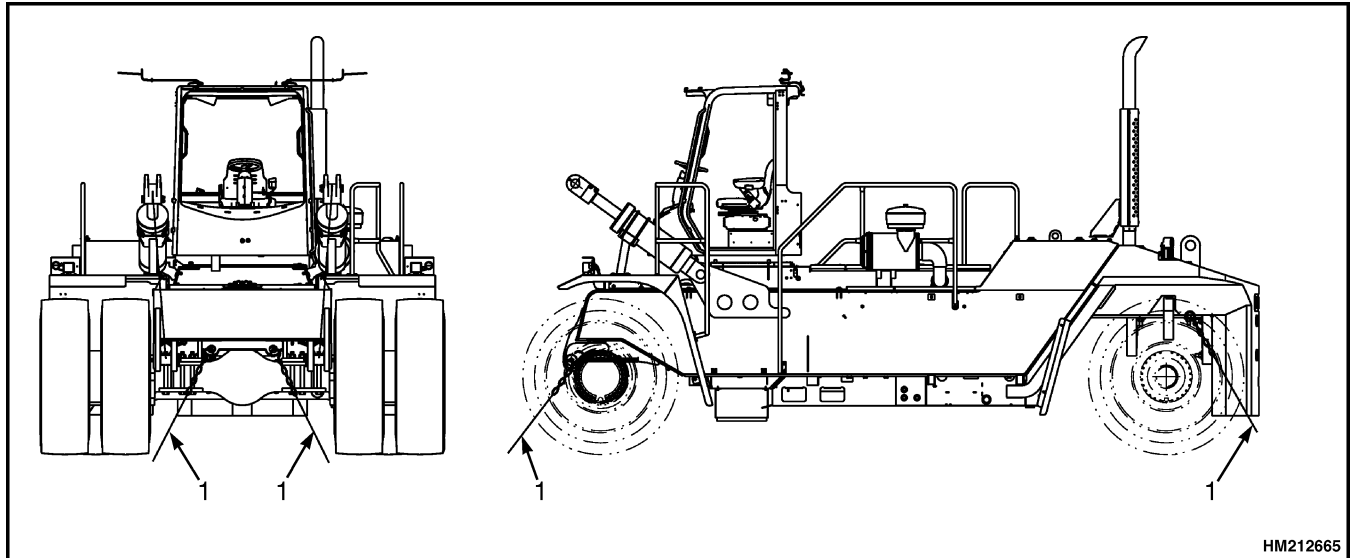
1. Put blocks under the disassembled components for stability during transport and to allow loading and unloading with a fork lift. See Figure 7 through Figure 11.
2. When lifting the components with slings and/or hooks, attach these at the indicated lifting points and/or lifting eyes. Make sure the lifting device has the required capacity, see Figure 1 through Figure 6 for the weights of the components.



WARNING

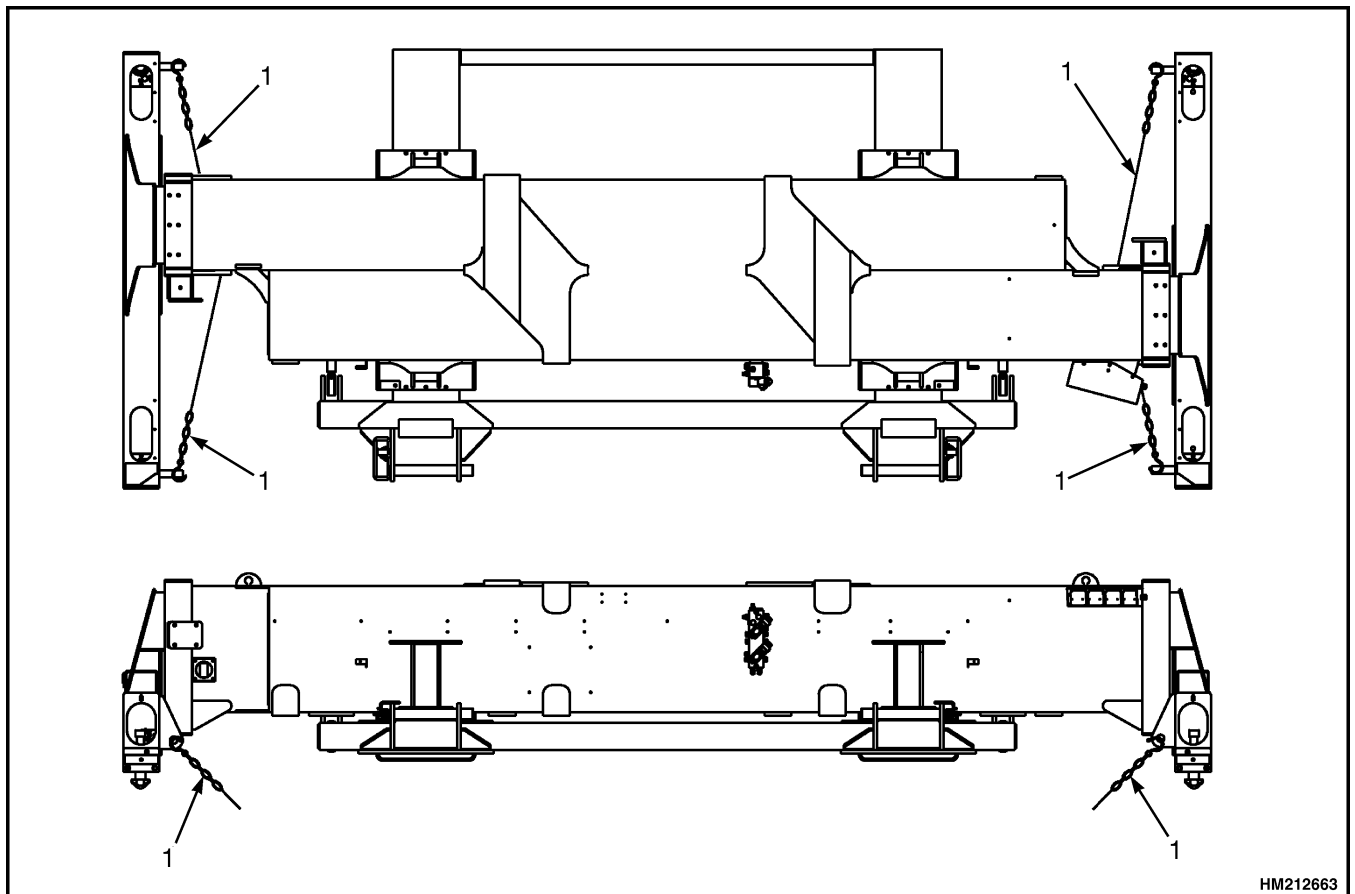
DO NOT use the bores for the mast pivot and the tilt cylinder mounting as a slinging point or as a tie down point.

3. Secure the components by connecting slings or chains to the indicated tie down points on Figure 7 through Figure 11 and the load surface of the trailer.



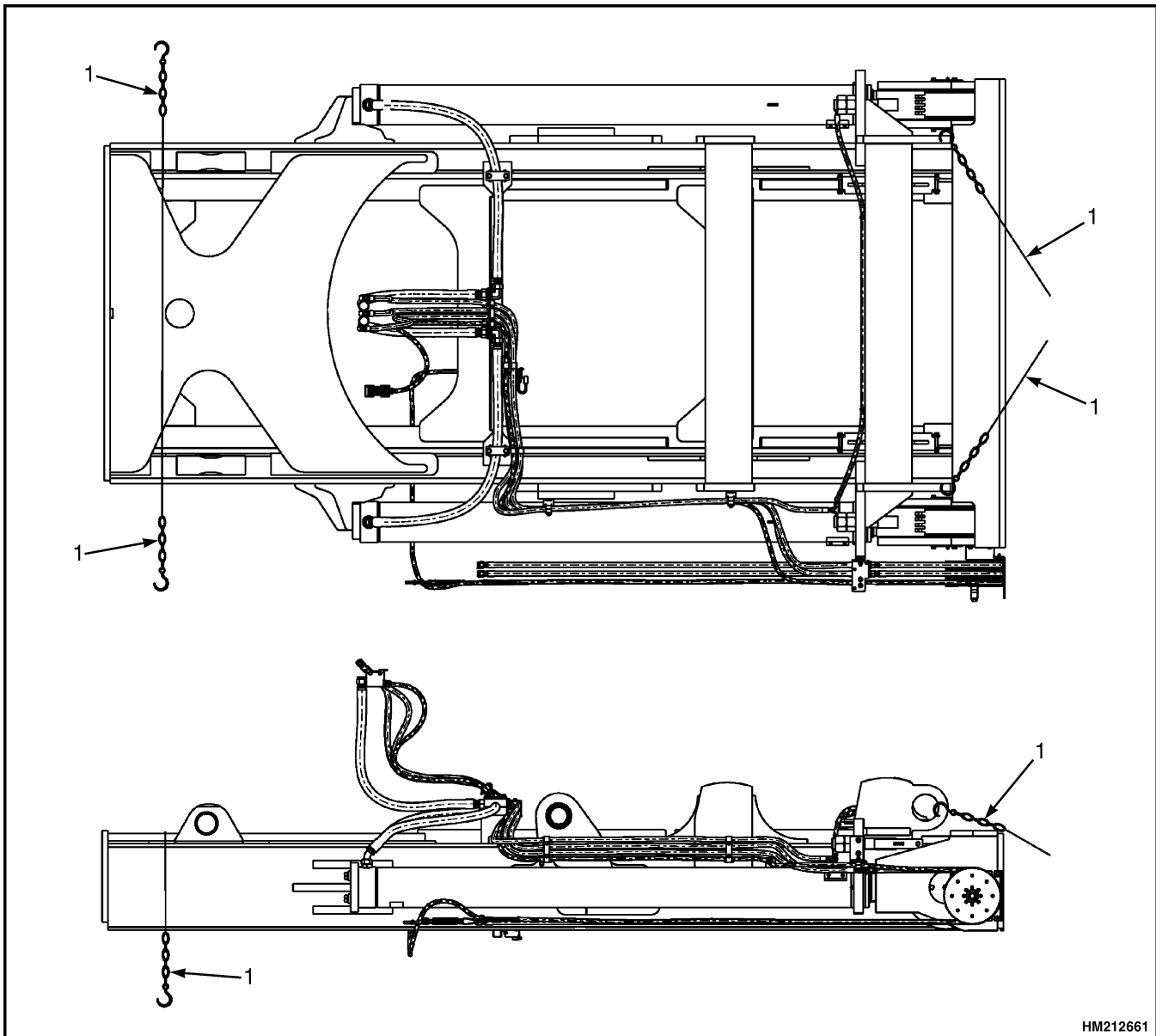
1. TIE DOWN POINT

Figure 7. Lift Truck Tie Down Placement



1. SLING OR TIE DOWN POINT

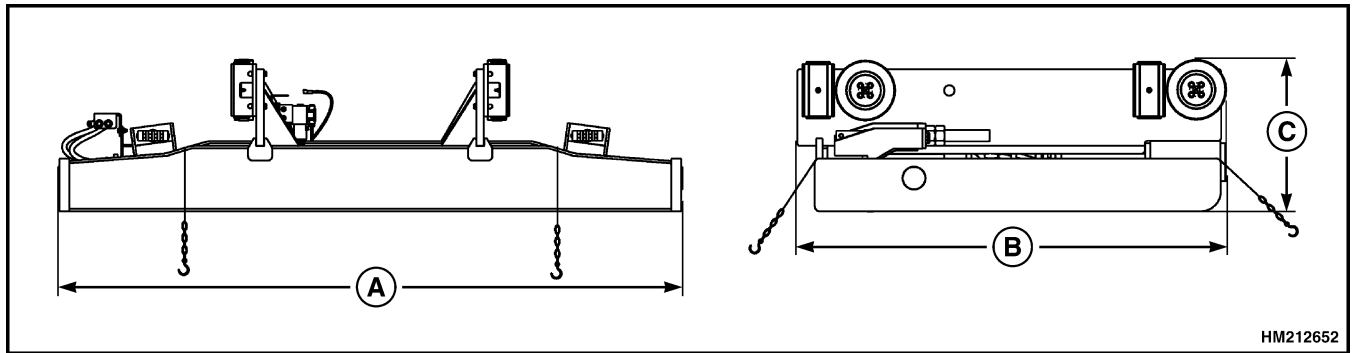
Figure 8. Attachment Tie Down Placement



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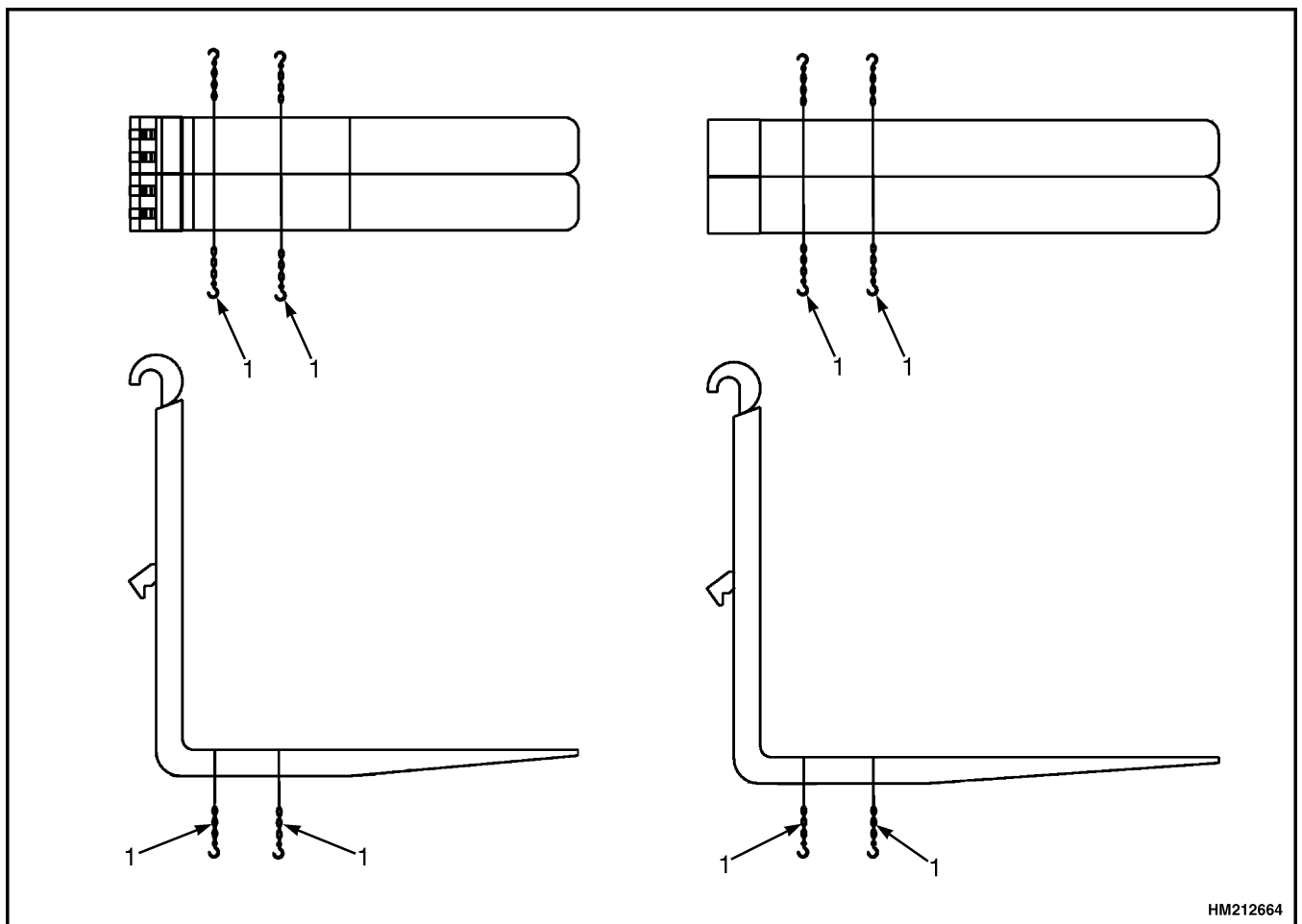
1. SLING OR TIE DOWN POINT

Figure 9. Mast Tie Down Placement



1. SLING OR TIE DOWN POINT

Figure 10. Carriage Tie Down Placement



1. SLING OR TIE DOWN POINT

Figure 11. Forks Tie Down Placement

Unloading Procedures

UNLOADING TRUCK FROM TRANSPORT

Driving On/Off a Trailer

When the truck will be driven from a trailer make sure to have read and understood the Starting Procedures as described in the **Operating Manual**.

1. Make sure the parking brake is applied.
2. Disconnect the straps or chains that attach the truck to the trailer.
3. Remove the wheel blocks.
4. Start the truck, release the park brake and let a assistant provide directions when driving off the trailer.
5. Park the truck. Apply the hand brake and turn the ignition **OFF**.

See the procedures under Moving and Towing if the truck cannot be started and must be moved.

See the procedures under Add Air Pressure to the Tires if air pressure in one of the tires is less than 80% of the pressure as indicated on the nameplate.

UNLOADING DISASSEMBLED COMPONENTS

To lift the components from a transport either use a fork lift or attach hooks and/or slings to the lifting eyes and slinging points as indicated on Figure 7 through Figure 11.



WARNING

DO NOT use the bores for the mast pivot and the tilt cylinder mounting as a slinging point.

For the required capacity of the lifting device see Table 1 through Table 6 for the weights of the components.

Use blocks to support the component when temporarily storing the component on the ground.

The blocks for the carriage must be high enough to keep the fork guides from the ground.

Moving and Towing

PRECAUTIONS



CAUTION

While the lift truck is being towed the engine must stay running in order to generate sufficient hydraulic oil pressure. Without hydraulic pressure the steering system and service brake system do not operate, and the park brake will automatically apply. The parking brake can be manually released if no hydraulic pressure is available.



CAUTION

Without oil pressure the transmission will be damaged during towing. If the engine cannot run during towing, remove the drive shaft between transmission and drive axle.



WARNING

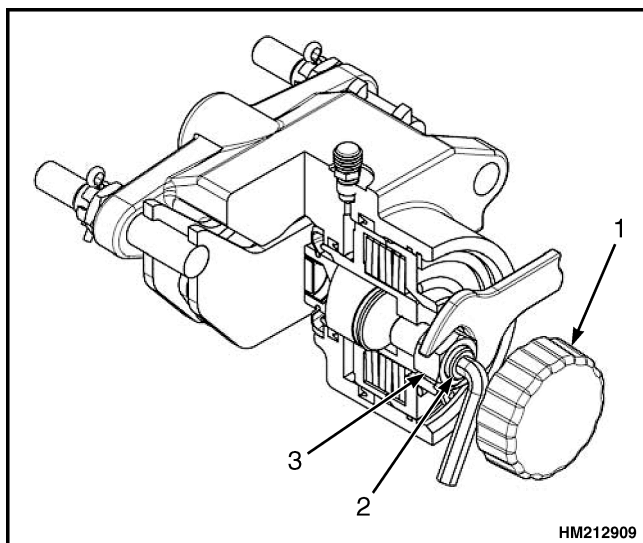
When the parking brake is manually released, the lift truck does not have any parking brake function. Block the wheels to prevent the lift truck from moving. If the wheels are not blocked, serious personal injury and damage to components can occur.

NOTE: If the parking brake is manually released, it will need to be adjusted before the lift truck is returned to service. With hydraulic pressure applied to the parking brake, adjust play between brake disc and park brake pads to 1.0 mm (0.03936 in.).

The parking brake caliper is mounted on a support bracket which is mounted on the differential carrier assembly. To manually release the parking brake, perform the following procedures:

1. Place blocks on both sides (front and rear) of the drive tires to prevent movement of the lift truck.
2. Remove the plastic screw cap. See Figure 12.
3. Loosen the lock nut.
4. Turn the adjustment screw counterclockwise until the brake disc is free.
5. Tighten the lock nut and install the plastic screw cap hand tight.

NOTE: After the parking brake has been manually released, it will need to be adjusted before the lift truck is returned to service.



1. PLASTIC SCREW CAP
2. ADJUSTING SCREW
3. LOCK NUT

Figure 12. Releasing the Parking Brake

MOVING A DISABLED TRUCK



WARNING

DO NOT tow the lift truck if a load is attached. Use extra caution when moving a lift truck if any of the following conditions exist:

- Brakes do not operate correctly.

- Steering does not operate correctly.
- Tires are damaged.
- Traction conditions are bad.
- The lift truck must be towed on a slope.
- If the engine cannot run, there is no power assist available for the steering and service brakes. This can make the control of the lift truck difficult. Poor traction can cause the disabled lift truck or towing vehicle to slide. Steep grades will increase the required brake effort.



WARNING

NEVER lift and move a disabled lift truck unless the disabled lift truck **MUST** be moved and cannot be towed.

1. Remove the drive shaft.
2. The towed lift truck must have an operator.
3. Tow the lift truck slowly.
4. Raise the carriage and forks approximately 30 cm (12 in.) from the surface. Install a chain to prevent the carriage and mast channels from moving.
5. If another lift truck is used to tow the disabled lift truck, that lift truck must have an equal or larger capacity than the disabled lift truck. Install approximately half of a capacity load on the forks of the lift truck that is being used to tow the disabled lift truck. This half capacity load will increase the traction of the lift truck. Keep the load as low as possible.
6. Use a towing link made of steel that fastens to both lift trucks. Connect the towing link to an adequate provision, such as a towing pin or lifting eye.
7. After towing is completed, place blocks on both sides (front and rear) of all drive and steering tires and re-apply the parking brake.

Safety Procedures When Working Near Mast

The following procedures **MUST** be used when inspecting or working near the mast. Additional precautions and procedures can be required when repairing or removing the mast. See the correct Service Manual section for the specific mast being repaired.

WARNING

Mast parts are heavy and can move. Distances between parts are small. Serious injury or death can result if part of the body is hit by parts of the mast or the carriage.

- Never put any part of the body into or under the mast or carriage unless all parts are completely lowered or a safety chain is installed. Also make sure that the power is OFF and the key is removed. Put a **DO NOT OPERATE** tag in the operator's compartment. Disconnect the battery on electric lift trucks and put a tag or lock on the battery connector.
- Be careful of the forks. When the mast is raised, the forks can be at a height to cause an injury.
- **DO NOT** climb on the mast or lift truck at any time. Use a ladder or personnel lift to work on the mast.
- **DO NOT** use blocks to support the mast weldments nor to restrain their movement.
- Mast repairs require disassembly and removal of parts and can require removal of the mast or carriage. Follow the repair procedures in the correct Service Manual for the mast.

WHEN WORKING NEAR THE MAST ALWAYS:

- Lower the mast and carriage completely. Push the lift/lower control lever forward and make sure there is no movement in the mast. Make sure that all parts of the mast that move are fully lowered.

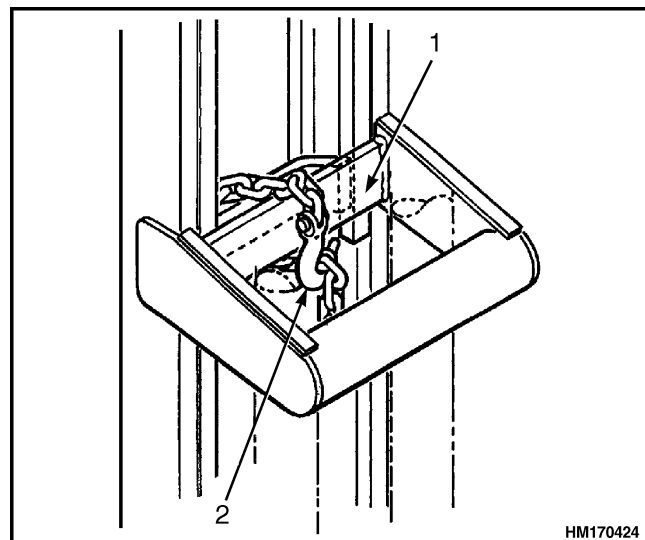
OR

- If parts of the mast must be in a raised position, install a safety chain to restrain the moving parts of the mast. Connect moving parts to a part that does not move. Follow these procedures:

1. Put the mast in a vertical position.
2. Raise the mast to align the bottom crossmember of the weldment that moves in the outer weldment with a crossmember on the outer weldment.
3. Use a 1/2 inch minimum safety chain with a hook to fasten the crossmembers together so the movable member cannot lower. Put the hook on the back side of the mast. Make sure the hook is completely engaged with a link in the chain. Make sure the safety chain does not touch lift chains or chain sheaves, tubes, hoses, fittings, or other parts on the mast. See Figure 13.

Before Starting Repairs to the Hydraulic System Always:

1. Place the lift truck on a solid, level surface.
2. Apply the parking brake.
3. Tilt the mast completely forward.
4. Lower the carriage and inner mast completely.
5. Make sure the lift cylinders are completely retracted.



1. OUTER MAST
2. HOOK

Figure 13. Mast Safety Chains

6. Turn engine **OFF**.
7. Turn the key switch to the **ON** position.
8. Operate the lift and tilt levers completely forward and backward to remove any trapped hydraulic pressure.
9. Apply the brake pedal until the brake lights do not longer come ON when the brake pedal is fully depressed.
10. Turn the key switch to the **OFF** position.
11. Place blocks against both sides (front and back) of the tires to prevent movement of the lift truck.

Truck Assembly

MAST ASSEMBLY



WARNING

Verify that the mast lifting device has sufficient capacity to carry the weight of the mast. See Table 3 for mast weights.

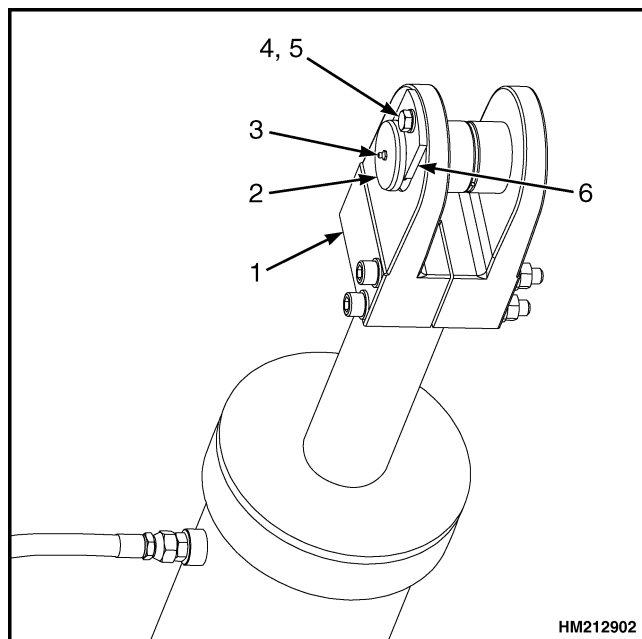
Preparations

1. Remove mast pin components from the truck.
2. Remove the tilt cylinder pins from the rod ends of the tilt cylinders. Figure 14.
3. Remove the chain packaging and tie wraps.

Install Hose Sheaves

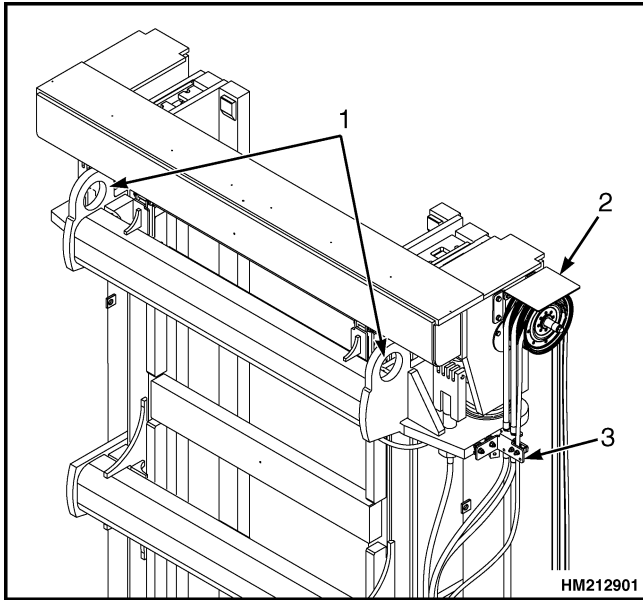
Follow below procedure if the hose sheaves and brackets were removed before transportation:

1. Remove the hardware from the right side of the mast that retains the upper mast bracket for the header hoses and the hose sheave bracket. See Figure 15.
2. Install the hose sheave bracket on the mast. Torque the bolts to 66 N·m (49 lbf ft). Ensure the header hoses are routed correctly.
3. Install the upper mast bracket for the header hoses. Torque the bolts to 66 N·m (49 lbf ft).



1. ROD END
2. TILT CYLINDER PIN
3. GREASE NIPPLE
4. CAP SCREW
5. WASHER
6. KEEPER PLATE

Figure 14. Tilt Cylinder Pins



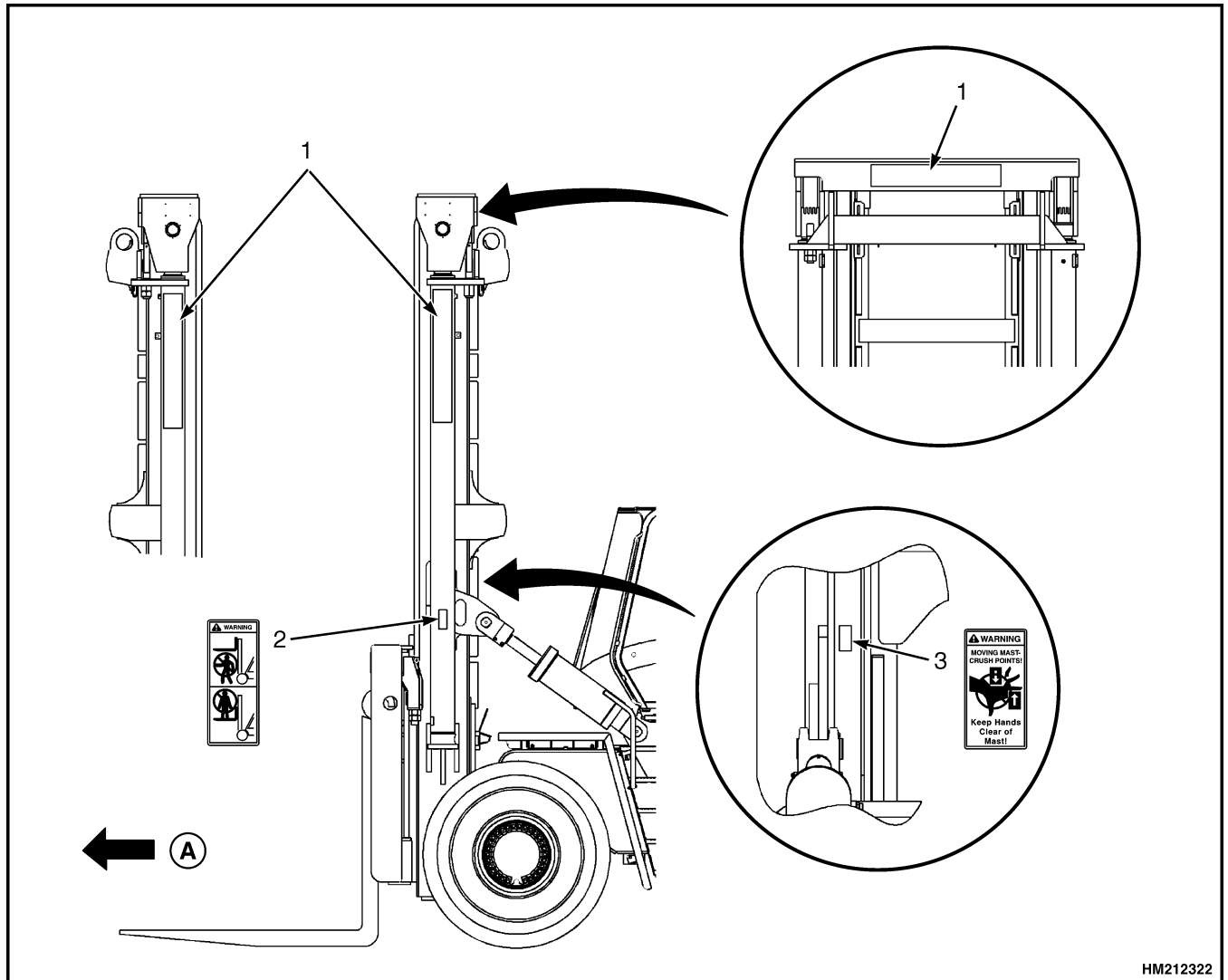
1. LIFTING EYES
2. HOSE SHEAVE BRACKET
3. UPPER MAST BRACKET

Figure 15. Lifting Eyes and Hose Sheave Brackets

Place Mast Labels

NOTE: The mast labels are stored in the card box located inside the operator's cab. The labels were not installed prior to shipment to prevent damage. Attach the labels before mounting the mast to the truck.

1. Clean the mast in the areas of label replacement prior to affixing the labels. Clean the mast with a solvent or high pressure washer using a water soluble degreaser with warm water.
2. Attach the truck label (item 1) to the top cross-member as shown in Figure 16.
3. Attach the truck label (item 1) to the left and right outside of the lift cylinders as shown in Figure 16.
4. Attach the no one under the mast (item 2) and mast pinch point warning labels to the left and right outside of the lift cylinders, align with tilt anchor as shown in Figure 16.

**A. DRIVE DIRECTION**

1. TRUCK LABEL
2. NO ONE UNDER THE MAST WARNING LABEL
3. MAST PINCH POINT WARNING LABEL

Figure 16. Mast Label Placement

Installing the Mast



WARNING

Verify that the mast lifting device has sufficient capacity to carry the weight of the mast. See Table 3 for mast weights.

1. Place the truck on a solid and level surface.
2. Apply the parking brake.
3. Turn engine **OFF**.
4. Remove the mast pivot pins including caps, washers, and temporary transporting sleeves from the mast hanger points.
5. Remove all paint, rust, or grease from the pivot pins surfaces, the inside of the caps, and the mast hanger holes. Connect a lifting device to the lifting eyes on the outer mast. See Figure 15.



CAUTION

Make sure that before installation, the mast mounting pins and the frame are completely free of grease at the conical faces of the pin and frame.

6. Lubricate the fittings on the chain sheaves and the load rollers.
7. Clean the two bearings for the tilt cylinder anchor pins on the outer mast. Also, clean the two holes for the mast pivot pins. Leave the two holes clean and dry. Do not grease the holes!
8. **If required**, install the chains partially into the sheaves until they reach the back of the mast. Connect the chains to the anchors with the chain anchor pins. Use new snap rings to lock the chain anchor pins. Check the threads on the chain anchors and repair damaged

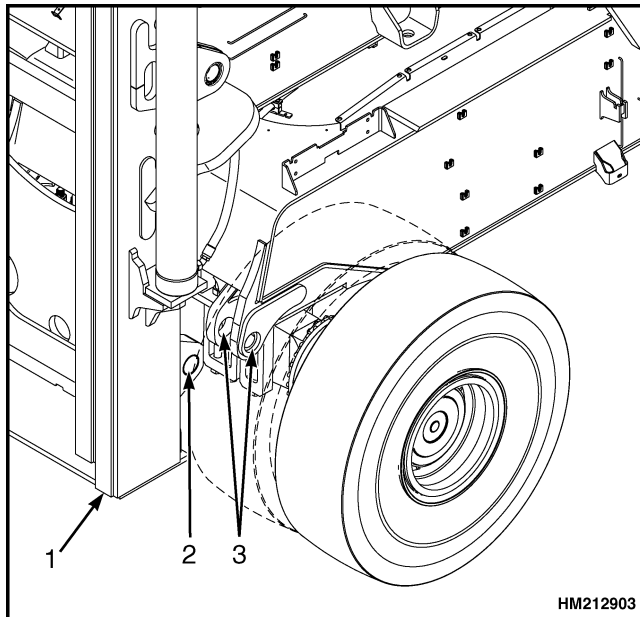
thread, if necessary. Mount the chain anchors to the brackets at the back of the mast. Protect the threads during the installation. Use straps to hold the ends of the chains to each of the lift cylinders.



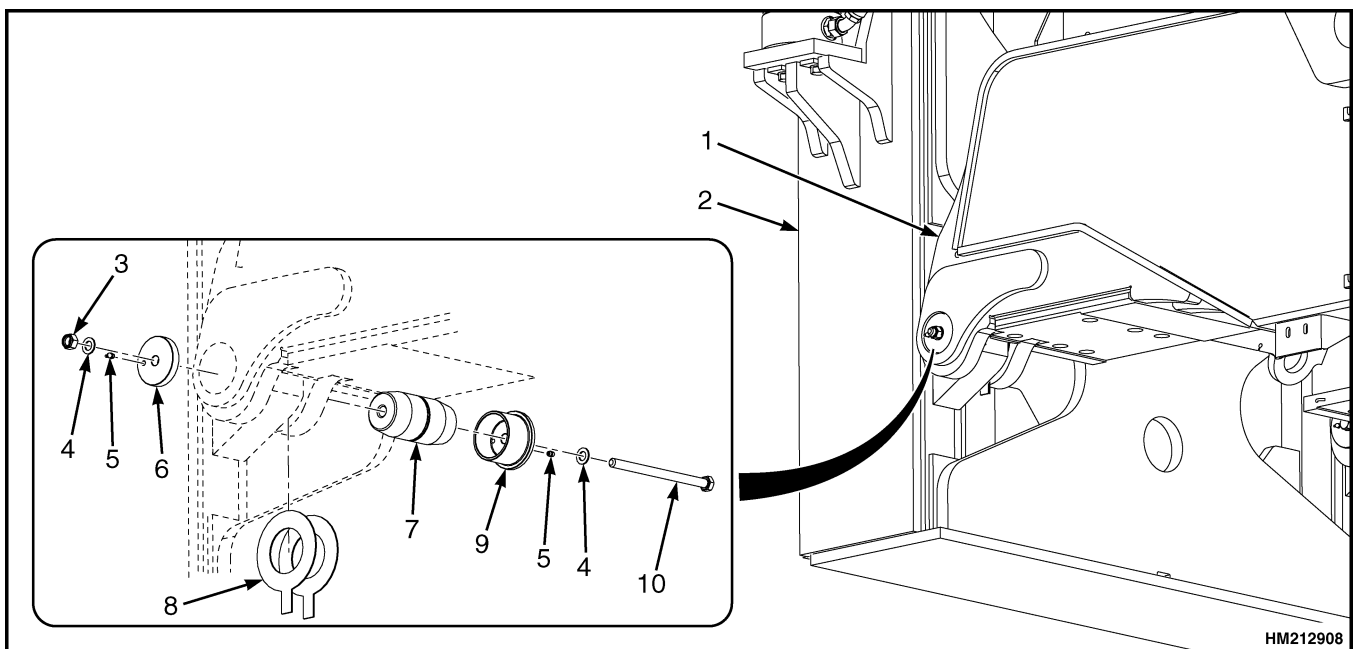
WARNING

Make sure the lifting device has the correct capacity for the parts being moved. Consult the specification chart for the weight of the parts.

9. Connect a lifting device with a correct capacity to the lifting eyes.
10. Position the mast in front of the truck.
11. Move the mast hanger to the frame hanger bracket. See Figure 17.
12. Align the holes of the mast hangers with the holes of the frame hangers.
13. Establish the number of required shims between frame and the mast hanger outside faces. Limit play to 3 mm (0.19 in.). Divide the shims equally between the left and right hand side of the truck.
14. Install the mast mounting pins from the inside to the outside of the frame. Make sure the lifting device controls the mast. See Figure 18 and Figure 19.
15. Position the inner caps in the frame with the grease fittings towards the front of the truck.
16. Install the capscrews, washers, and outer caps to retain the mast mounting pins to the mast and frame. Tighten the capscrews to 320 N·m (236 lbf in).
17. Lubricate the pins until grease escapes at the mast hangers.

**Legend for Figure 17**

1. MAST
2. MAST HANGER
3. FRAME HANGER

Figure 17. Mast Pivot Point

- | | |
|-------------------|----------------------|
| 1. FRAME | 6. OUTER CAP |
| 2. OUTER MAST | 7. MAST MOUNTING PIN |
| 3. NUT | 8. SHIMS |
| 4. WASHER | 9. INNER CAP |
| 5. GREASE FITTING | 10. CAP SCREW |

Figure 18. Mast Mount to Frame