Your dealer for **Yale** lift trucks will advise you on the maintenance time intervals based on their survey of the application.

Your dealer for **Yale** lift trucks has the equipment and trained service personnel to do a complete program of inspection, lubrication, and maintenance. A regular program of inspection, lubrication, and maintenance will help your lift truck provide more efficient performance and operate for a longer period of time.

Some users have service personnel and equipment to do the inspection, lubrication, and maintenance shown in the **Maintenance Schedule**. **Service Manuals** are available from your dealer for **Yale** lift trucks to help users who do their own maintenance.

Serial Number Data

The serial number code for the lift truck is on the Nameplate. The code is also stamped on the right side of the rear bulkhead (battery compartment) on the top edge or on the front face near the top.

How to Move a Disabled Lift Truck

⚠ WARNING

Use extra care when towing a lift truck if there is a problem with any of the following:

- **Brakes do not operate correctly.**
- **Steering does not operate correctly.**
- **Tires are damaged.**
- **Traction conditions are bad.**
- **The lift truck must be moved on a steep grade.**

If the hydraulic pump motor, which includes the steering control functions, does not operate, steering control of the lift truck can be slow. This can make the control of the lift truck difficult. If there is no electrical power, there is no power steering. DO NOT tow the lift truck if there is no power. Poor traction can cause the disabled lift truck or towing vehicle to slide. Steep grades will require additional brake force to stop the lift truck.

⚠ WARNING

ever carry a disabled lift truck unless the lift truck UST be moved and cannot be towed. The lift truck used carry the disabled lift truck MUST have a rated apacity equal to or greater than the weight of the disaled lift truck. The capacity must be for a load center qual to half the width of the disabled lift truck.

ee the Nameplate of the disabled lift truck for the approxiate total weight. The forks must extend the full width of the isabled lift truck. Center the weight of the disabled lift truck n the forks and be careful not to damage the under side of he lift truck.

How to Tow the Lift Truck

1. The towed lift truck must have an operator.

2. Raise the carriage and forks approximately 300 mm (12 in.) from the surface. Install a chain to prevent the carriage and mast channels from moving.

3. Tow with another lift truck of *equal* or *greater* capacity than the disabled lift truck. Install a load of approximately half-capacity on the forks of the lift truck that is being used to tow the disabled lift truck. The half-capacity load will increase the traction of the lift truck. Keep the load as low as possible.

4. Use a towing link made of steel that fastens to the tow pins in the counterweights of both lift trucks.

5. Release the parking brake.

6. Tow the lift truck slowly.

How to Put a Lift Truck on Blocks

⚠ WARNING

The lift truck must be put on blocks for some types of maintenance and repair. The removal of the following assemblies will cause large changes in the center of gravity: mast and drive assembly, battery or the counterweight. When the lift truck is put on blocks, put additional blocks in the following positions to maintain stability:

- **Before removing the mast and drive assembly, put blocks under the counterweight so that the lift truck cannot tip backward.**
- **Before removing the battery and counterweight, put blocks under the mast assembly so that the lift truck cannot tip forward.**

Put the lift truck on blocks only if the surface is solid, even and level. Make sure that any blocks used to support the lift truck are solid, one-piece units.

NOTE: Some lift trucks have lifting eyes. These lift points can be used to raise the lift truck so that blocks can be installed.

How to Raise the Drive Tires

1. Put blocks on each side (front and back) of the steer tires to prevent movement of the lift truck. See Figure 18.

2. Put the mast in a vertical position. Put a block under each outer mast channel.

3. Tilt the mast fully forward until the drive tires are raised from the surface.

4. Put additional blocks under the frame behind the drive tires.

5. If the hydraulic system will not operate, use a hydraulic jack under the side of the frame near the front. Make sure that the jack has a capacity equal to at least half the weight of the lift truck. See the Nameplate.

ow to Raise the Steering Tires

. Apply the parking brake. Put blocks on both sides (front nd back) of the drive tires to prevent movement of the lift uck. See Figure 18.

. Use a hydraulic jack to raise the steering tires. Make sure at the jack has a capacity of at least 2/3 of the total weight f the lift truck as shown on the Nameplate.

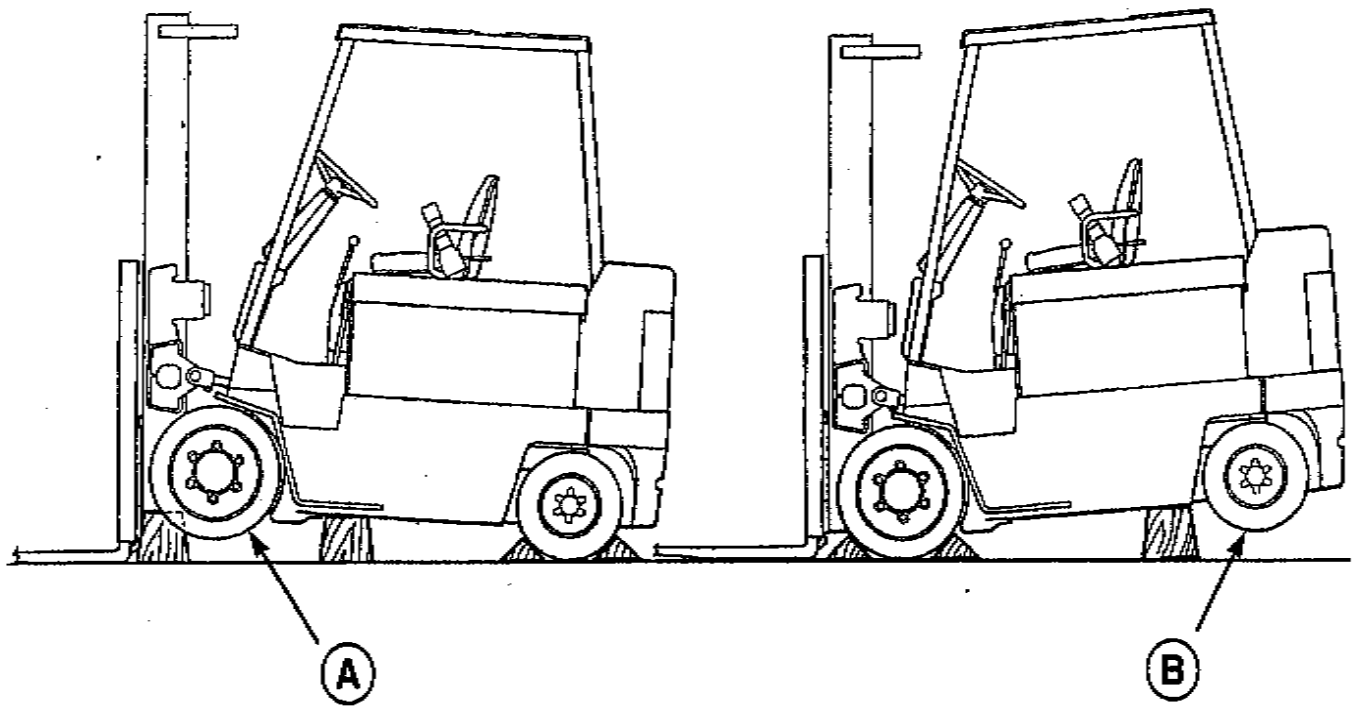
. Put the jack under the steering axle or frame to raise the ft truck. Put blocks under the frame to support the lift truck.

How to Clean a Lift Truck

⚠ CAUTION

Your lift truck may be damaged if water or cleaning agents come in contact with electrical components. DO NOT directly spray any electrical components, especially connectors, switches, electro-hydraulic controls, battery area, and dash display during the cleaning process.

Portions of your lift truck may be washed with a non-heated pressure washer. Steam cleaning is not recommended in most instances, as condensation may form in electrical components causing damage or erratic behavior. For cleaning guidelines and components to avoid, see the **Periodic Maintenance** section of the **Service Manual** for your lift truck.



A. DRIVE WHEEL

B. STEER WHEEL

Figure 18. Put a Lift Truck on Blocks

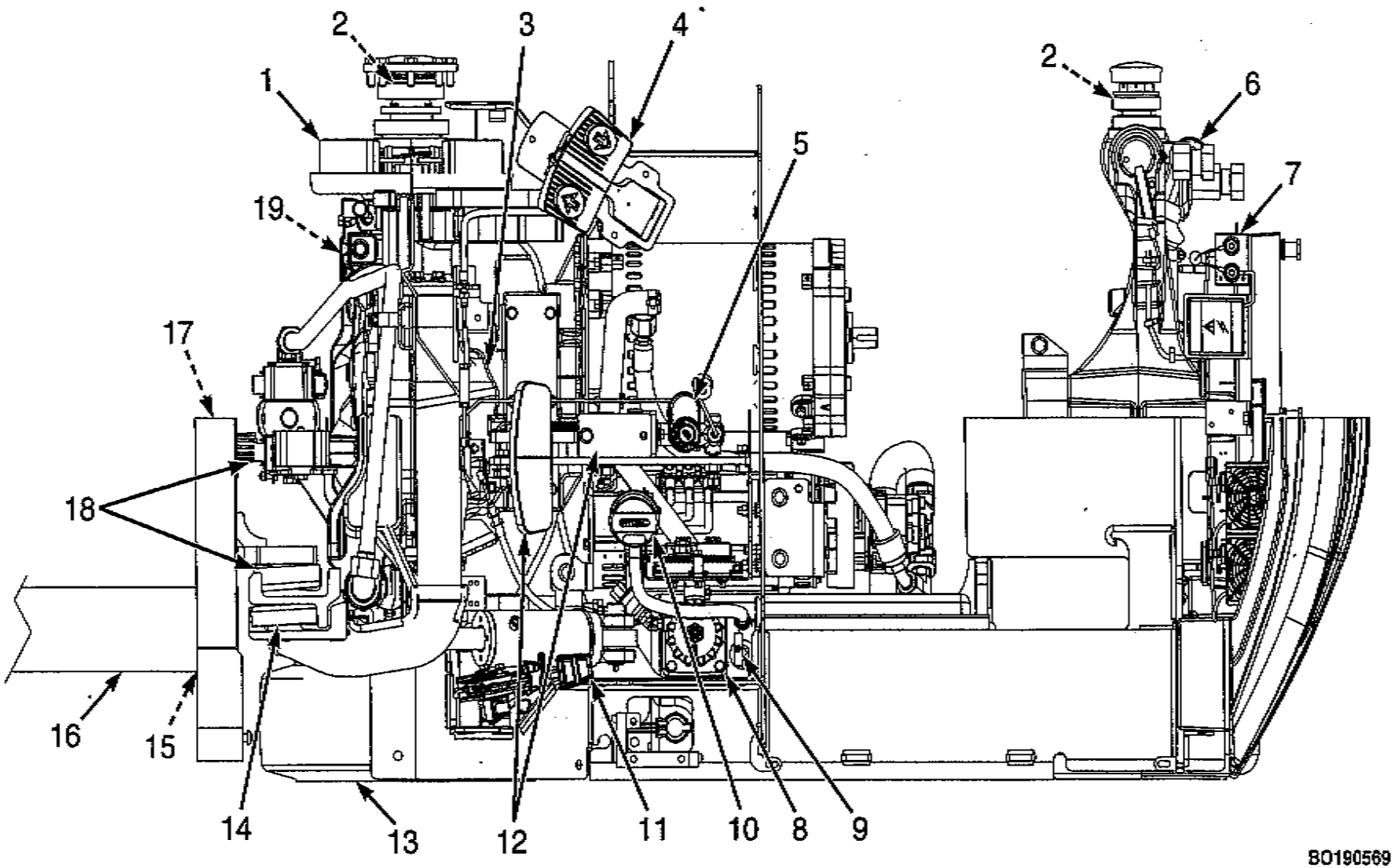


Figure 19. Maintenance Points, Lift Trucks Manufactured Before September, 2012

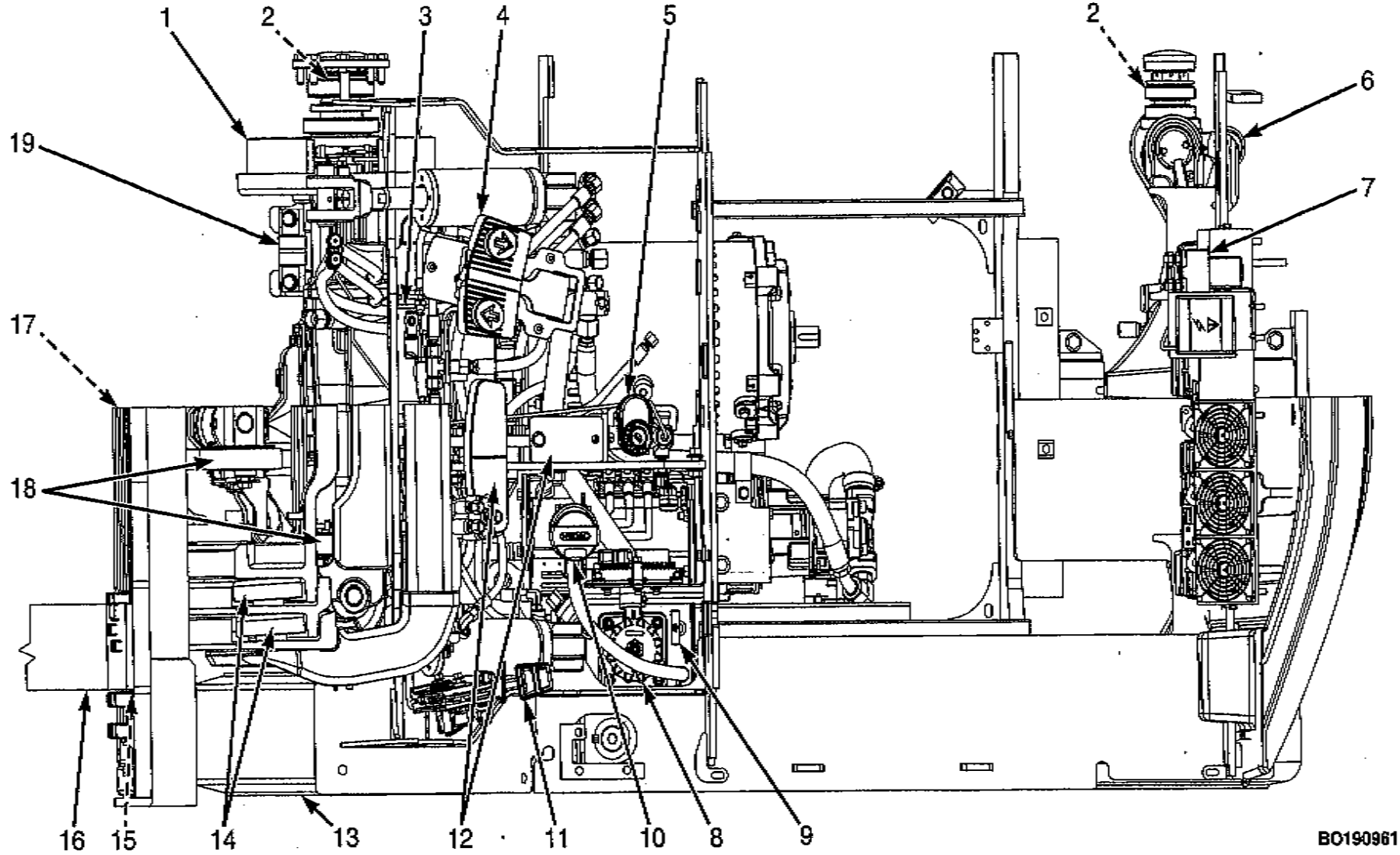


Figure 20. Maintenance Points, Lift Trucks Manufactured After September, 2012

Maintenance Schedule

Table 8. Maintenance Schedule (See Figure 19 and Figure 20)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
13	TIRES	X				Check Condition.	
11	PARKING BRAKE	X CIL				Check Operation.	
1	SERVICE BRAKES	X CIL				Check Operation.	See **Parts Manual**.
5	BRAKE FLUID	CIL	X	C		0.18 liter (0.4 pt)	SAE J-1703 (DOT 3)
3	DIFFERENTIAL AND SPEED REDUCER	X				Check for Leaks.	
18	LIFT CHAINS	X				Check Condition. Lubricate if Necessary. See NOTE 3.	SAE 10W-30 Engine Oil
16	FORKS	X	X	X		Check condition. Replace if Necessary.	
4	DIRECTION AND SPEED CONTROL PEDALS	X				Check Operation. Lubricate as Necessary.	Use Multipurpose Grease. See NOTE 1.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
9	HYDRAULIC OIL (Total Capacity) Plastic Tank	X			C	32.0 liter (33.8 qt)	−18 to 38 °C (0 to 100 °F) Hydraulic Oil ISO VG46
9	HYDRAULIC OIL (Total Capacity) Metal Tank	X			C	34.0 liter (35.9 qt)	−18 to 38 °C (0 to 100 °F) Hydraulic Oil ISO VG46
	HORN, LIGHTS, AND ALARM	X				Check Operation.	
	OIL LEAKS	X				Check for Leaks.	
	SAFETY LABELS	X				Replace as Necessary.	See **Parts Manual**.
	BATTERY	X				Check Condition.	See NOTE 4.
	HOOD LATCH	X				Lubricate as Necessary. Check Operation.	Use Multipurpose Grease. See NOTE 1.
	STEERING COLUMN TILT MEMORY LEVER	X				Lubricate as Necessary. Check Operation.	Use Multipurpose Grease. See NOTE 1.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
	SEAT BELT AND SEAT RAILS	X CIL				Lubricate as Necessary. Check Operation. Check Condition.	
11	PARKING BRAKE ADJUSTMENT		X			Adjust as Necessary.	Must Hold a Full Capacity Load on a 15% Grade.
19	PIVOTS (MAST)		L			2 Fittings. Lubricate as Required.	Use Multipurpose Grease. See NOTE 1.
14	MAST SLIDING SURFACES		L			Lubricate as Required. See NOTE 5.	Use Multipurpose Grease. See NOTE 1.
17	INTEGRAL SIDESHIFT CARRIAGE		L			2 fittings. See NOTE 5.	Use Multipurpose Grease. See NOTE 1.
17	INTEGRAL SIDESHIFT CARRIAGE Fork Positioner		L			Lubricate as required. 2 fittings. See NOTE 5.	Use Multipurpose Grease. See NOTE 1.

X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
	OPERATOR PRESENCE SYSTEM CHECK		X			Check Operation.	
	HEADER HOSES, HOSE FITTINGS, AND CLAMPS		X			Inspect for Kinked, Flattened, Stiff, or Charred Hoses.	Replace if Necessary.
3	DIFFERENTIAL AND SPEED REDUCER		X			Check Oil Level. 4.8 liter (5.0 qt)	Use Gear Lube SAE 80W or Gear Oil SAE 80W-90 (Chevron) or Equivalent.
	TILT CYLINDER ROD END PINS	X	L				Use Multipurpose Grease. See NOTE 1.
11	PARKING BRAKE		L			Lubricate Linkage. See NOTE 2.	Use Silicone Spray Yale P/N 504236201.
12	BRAKE PEDAL LINKAGE AND SHAFTS		L			See NOTE 2.	Use Multipurpose Grease. See NOTE 1.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
18	LIFT CHAINS		L			Check Stretch and Lubricate. See NOTE 2 and NOTE 3.	SAE 10W-30 Engine Oil.
18	LIFT CHAINS		X			Check Adjustment and Length. See NOTE 2.	
15	FORK PINS AND GUIDES	X	L			Lubricate as Necessary.	SAE 10W-30 Engine Oil.
10	HYDRAULIC TANK BREATHER		X	C		Clean or Replace. See NOTE 2.	See **Parts Manual**.
17	INTEGRAL SIDESHIFT CARRIAGE (Upper/Lower Bearings)		X			Check Wear. 4 Bearings. See NOTE 5.	2.5 mm (0.098 in.) Minimum Thickness.
17	INTEGRAL SIDESHIFT CARRIAGE Lower Mounting Hook		X			Check for Wear and Clearance. See NOTE 2.	0.76 mm (0.03 in.) Minimum Wear Limit.
7	CONTACTORS		X			Check Condition.	See **Parts Manual**.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
6	STEERING KING PINS		L			4 Fittings. Lubricate as Required. See NOTE 2.	Use Multipurpose Grease. See NOTE 1.
	HINGES, LEVERS, LINKAGE, PEDALS, SEAT RAILS, AND LATCHES		L			Lubricate as Required.	Use Multipurpose Grease. See NOTE 1 and NOTE 2.
17	INTEGRAL SIDESHIFT CARRIAGE (Upper/Lower Bearings)			C		Replace Bearings. 4 Bearings.	2.5 mm (0.098 in.) Minimum Thickness. See **Parts Manual**.
1	SERVICE BRAKES			X		Check Condition.	See **Parts Manual**. Minimum Thickness. 1 mm (0.04 in.)
2	WHEEL BEARINGS Steer and Drive Wheels			L		Check Grease.	Use Multipurpose Grease. See NOTE 1.
8	HYDRAULIC OIL FILTER			C		1 Filter. See NOTE 2.	See **Parts Manual**.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
3	DIFFERENTIAL AND SPEED REDUCER			C		Change Oil. 4.8 liter (5.0 qt)	Use Gear Lube SAE 80W or Gear Oil SAE 80W-90 (Chevron) or Equivalent.
18	LIFT CHAINS			L		Remove Lift Chains to Clean and Lubricate.	SAE 10W-30 Engine Oil.
	STEERING POSITION SENSOR				X	Check Sensor Assembly and Column Gear Teeth.	Replace Sensor or Column Gear as Required.
	TELESCOPIC STEERING COLUMN				L	Lubricate.	Use Manual Steering Gear Grease. See NOTE 6.
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Table 8. Maintenance Schedule (See Figure 19 and Figure 20) (Continued)

Item No.	Item	8 hr/ Daily	500 hr/ 3 mo.	2000 hr/ 1 yr	4000 hr/ 2 yr	Procedure or Quantity	Specifications
NOTE 1: Multipurpose grease with 2-4% Molybdenum Disulfide. NOTE 2: Recommended service intervals are based on a normal application in a clean environment. Applications involving contaminated environments such as high levels of airborne debris (dust and waste paper); chemical or abrasive compounds; poor ground conditions; intensive usage at high performance levels; or other abnormal conditions will require more frequent servicing. At your request, your **Yale** dealer will advise you of the appropriate service intervals based on an application survey. NOTE 3: Lubricate if dry or at first sign of visible surface rust. NOTE 4: Equalization charge is required approximately each month. NOTE 5: Maximize life of surfaces by lubricating every 250 hours for first 1000 hours. NOTE 6: Multipurpose Lithium Base Grease.							
X=Check C=Change L=Lubricate CIL=Check Indicator Light During Operation.							

Maintenance Procedures Every 8 Hours or Daily

⚠ WARNING

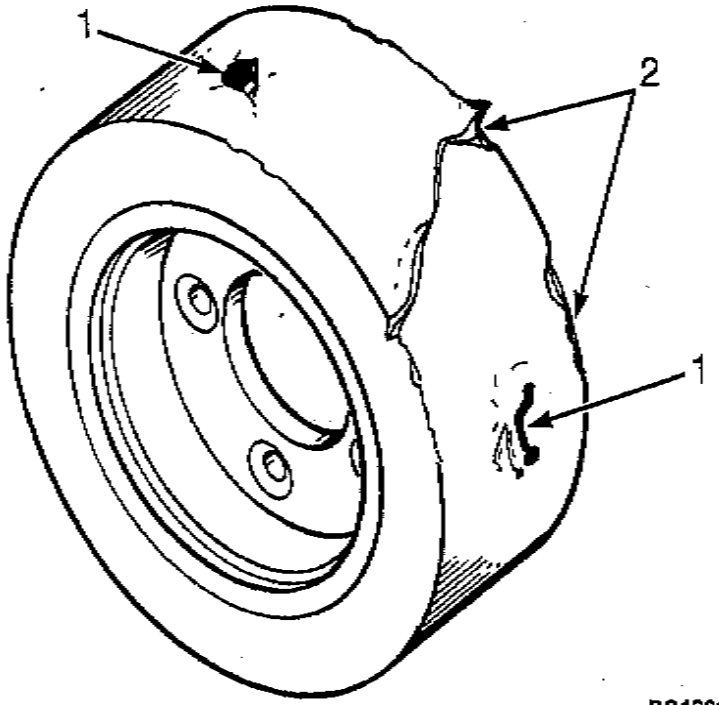
O NOT operate a lift truck that needs repairs. Report the eed for repairs immediately. If repair is necessary, put DO NOT OPERATE tag in the operator's area. Remove e key from the key switch.

spect the lift truck after every eight hours or daily before se. Put the lift truck on a level surface. Lower the carriage nd forks and turn the key or keyless switch to the **OFF** posi- on. Apply the parking brake. Remove the floor mat and rear ate. Inspect for leaks and conditions that are not normal. lean any oil spills. Make sure that lint, dust, paper and other aterials are removed from the compartments. Make the dditional checks as described in the following paragraphs **f How to Make Checks With the Key or Keyless Switch FF** and **How to Make Checks With the Key or Keyless witch ON.**

How to Make Checks With the Key or Keyless Switch OFF

Tires and Wheels

Inspect the tires for wire, rocks, glass, pieces of metal, holes, cuts and other damage. See Figure 21. Remove any object that will cause damage. Check for loose or missing hardware. Remove any wire strapping or other material that is wrapped around the axle.



1. CHECK FOR DAMAGE (REMOVE NAILS, GLASS, AND OTHER OBJECTS FROM THE TREAD)
2. MAKE SMOOTH EDGES

Figure 21. Tire Check

Forks, General

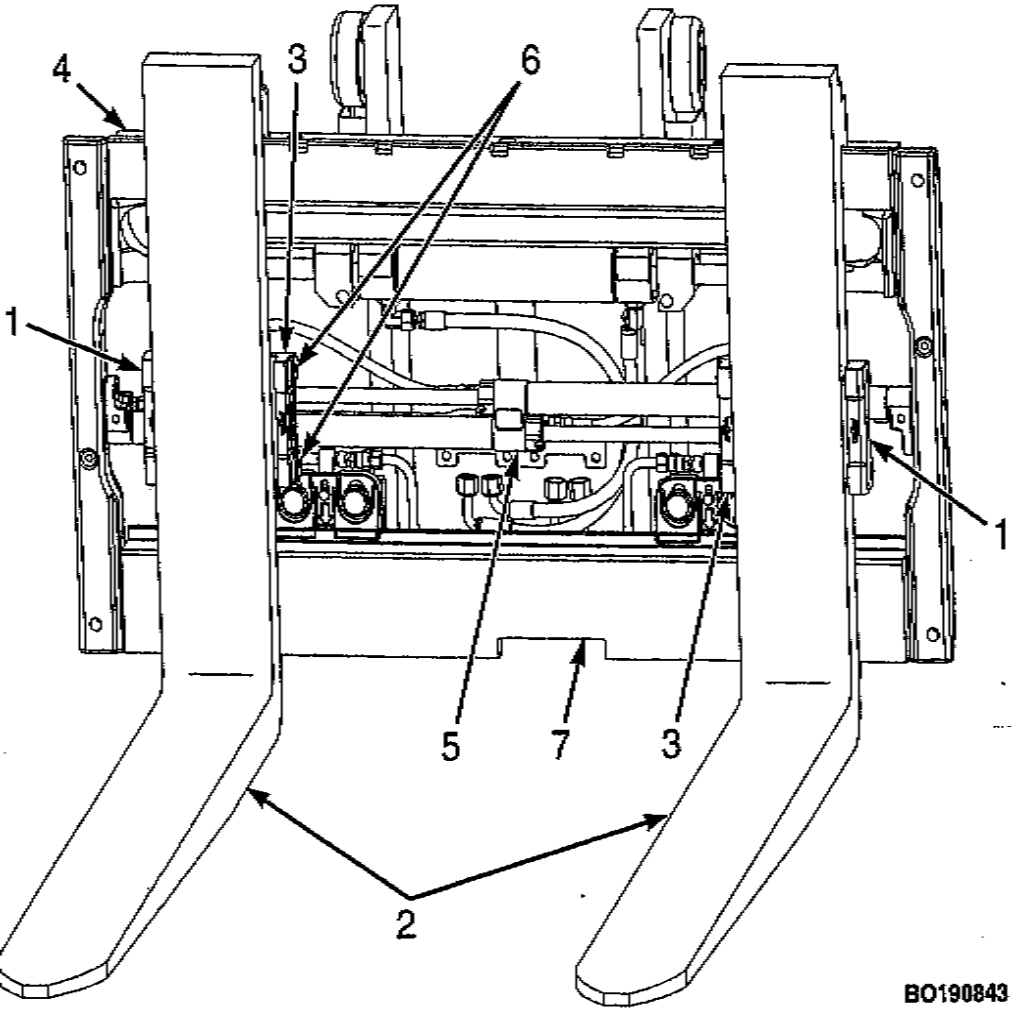
NOTE: Forks must be removed or installed by trained personnel only.

The identification of a fork describes how the fork is connected to the carriage. These lift trucks have hook forks.

Forks, Remove

NOTE: If lift truck is equipped with a fork positioner attachment, perform **Step 1** first, before going to **Step 2**. If lift truck is not equipped with a fork position attachment, go to **Step 2**.

1. Lower the carriage and remove four capscrews from inner fork carriers. Remove inner fork carriers from fork positioner. See Figure 22.



1. OUTER FORK CARRIER
2. FORKS
3. INNER FORK CARRIER
4. SIDESHIFT CARRIAGE
5. FORK POSITIONER
6. CAPSCREWS
7. FORK REMOVAL NOTCH

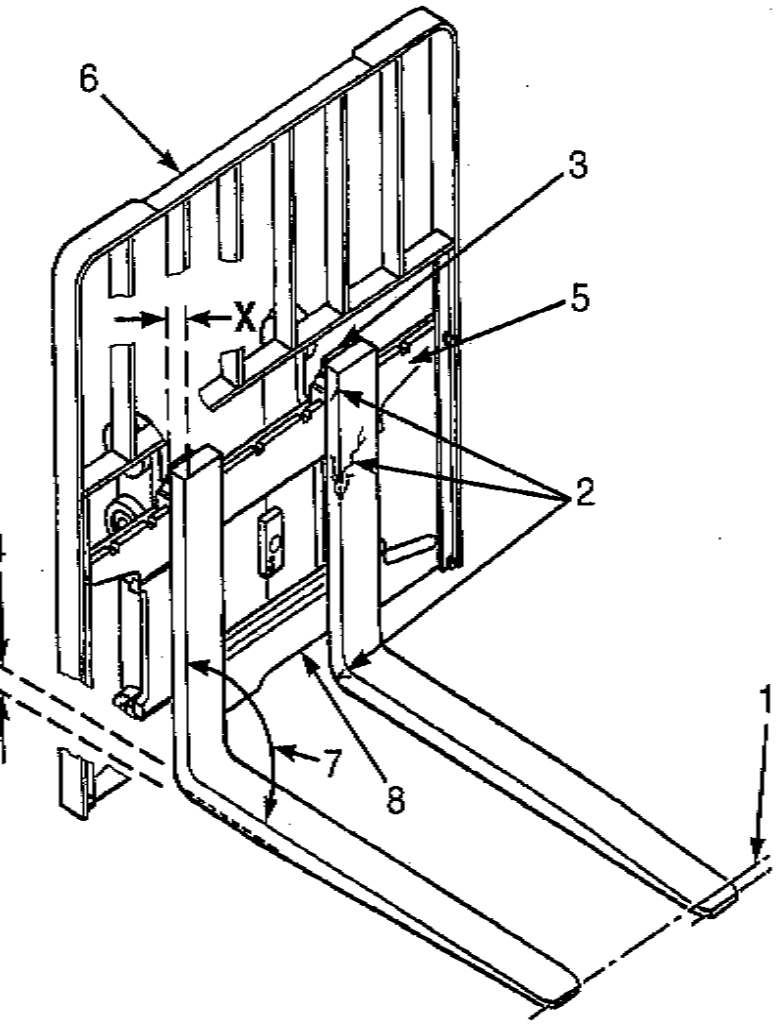
Figure 22. Fork Positioner

⚠ WARNING

DO NOT try to move a fork without a lifting device. The forks can weigh 45 to 115 kg (99 to 254 lb).

NOTE: Forks are to be replaced only in sets and not individually.

2. A fork can be removed from the carriage for replacement of the fork or other maintenance. Slide a hook fork to the fork removal notch on the carriage. See Figure 23. Lower the fork onto blocks so that the lower fork hook moves through the fork removal notch. See Figure 24 and Figure 25. Lower the carriage further so that the top fork hook is disengaged from the top carriage bar. Move the carriage away from the fork, or use a lifting device to move the fork away from the carriage.



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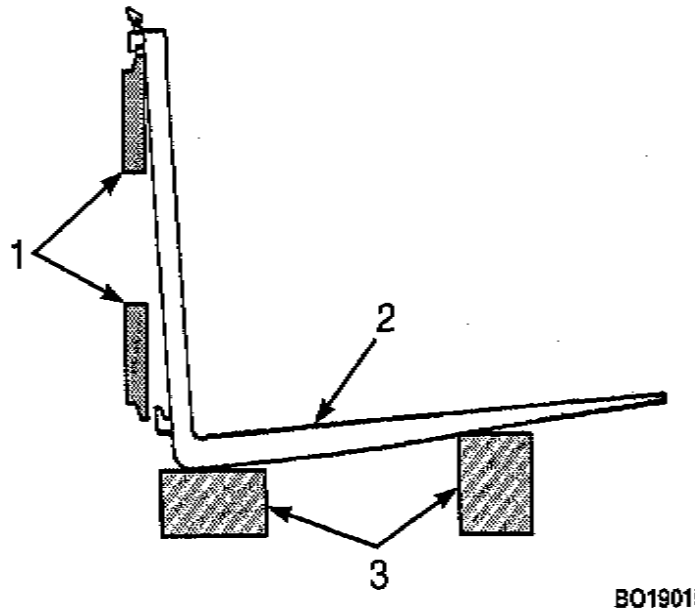
Fork Tip Alignment	
Length of Forks	**3% Dimension**
915 mm (36 in)	27 mm (1.10 in)
1067 mm (42 in)	32 mm (1.26 in)
1220 mm (48 in)	37 mm (1.46 in)
1372 mm (54 in)	41 mm (1.61 in)
1524 mm (60 in)	46 mm (1.81 in)
1830 mm (72 in)	55 mm (2.17 in)

1. TIP ALIGNMENT (MUST BE WITHIN 3% OF FORK LENGTH)
2. CRACKS
3. LATCH DAMAGE
4. HEEL OF FORK (MUST BE 90% OF DIMENSION "X")
5. CARRIAGE
6. LOAD BACKREST EXTENSION
7. MAXIMUM ANGLE 93°
8. FORK REMOVAL NOTCH

Figure 23. Forks Check



1. CARRIAGE BARS
2. HOOK FORK
3. BLOCKS

Figure 24. Remove a Hook Fork

Forks, Inspect

⚠ WARNING

DO NOT try to correct fork tip alignment by bending the forks or adding shims. Replace bent forks.

Never repair damaged forks by heating or welding. Forks are made of special steel using special procedures. Replace damaged forks. Forks are to be replaced only in sets and not individually.

1. Inspect the forks for cracks and wear. Check that the fork tips are aligned as shown in Figure 23. Check that the bottom of the fork is not worn (item 4 in Figure 23).

2. Replace any damaged or broken parts that are used to keep the forks locked in position. See Figure 25.

Forks, Install

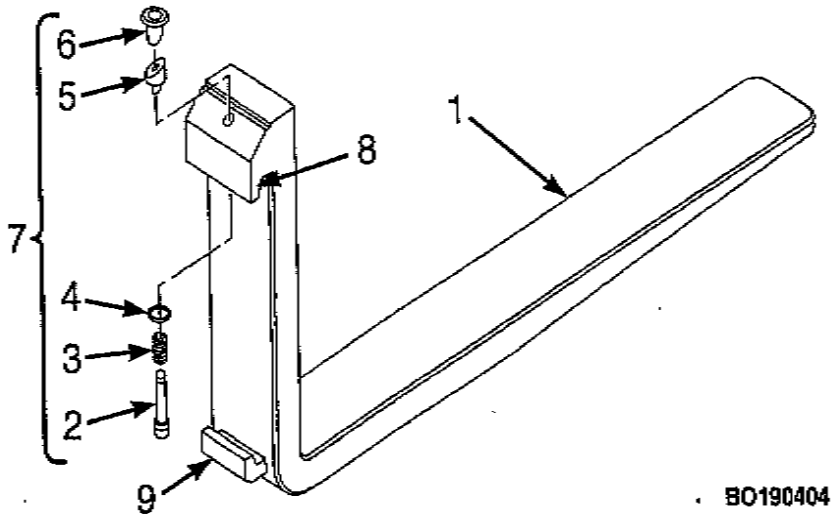
⚠ WARNING

DO NOT try to move a fork without a lifting device. The forks can weigh 45 to 115 kg (99 to 254 lb).

1. Move the fork and carriage so that the top fork hook can engage the top carriage bar. Raise the carriage to move the lower fork hook through the fork removal notch. Slide the fork

the carriage so that both upper and lower fork hooks gage the carriage. Engage the lock pin with a notch in the carriage bar. See Figure 25.

If lift truck is equipped with a fork positioner, install inner rk carriers using four capscrews. Tighten capscrews to 5 N•m (25 lbf ft). See Figure 22.



	FORK	6.	KNOB
	LOCK PIN	7.	LOCK PIN ASSEMBLY
	SPRING	8.	TOP FOR HOOK
	WASHER	9.	LOWER FORK HOOK
	WEDGE		

Figure 25. Fork Lock Pin Assembly

Forks, Adjust

NOTE: During the adjustment of the forks, the heel of the forks should not be touching the ground.

The forks are connected to the carriage by hooks and lock pins. See Figure 25. These lock pins are installed through the top fork hooks and fit into slots in the top carriage bar. Adjust the forks as far apart as possible for maximum support of the load. Hook forks will slide along the carriage bars to adjust for the load to be lifted. Raise the lock pin in each fork to slide the fork on the carriage bar. Make sure the lock pin is engaged in the carriage bar to lock the fork in position after the width adjustment is made.

Inspection of Mast, Carriage, Header Hoses, Lift Chains, and Attachments

⚠ WARNING

Lower the lift mechanism completely. Never allow any person under a raised carriage. DO NOT put any part of your body in or through the lift mechanism unless all parts of the mast are completely lowered and the lift truck motor is OFF.

1. Inspect the welds on the mast, cylinders, and carriage for cracks. Make sure that the capscrews and nuts are tight.

2. Inspect the channels for wear in the areas where the rollers travel. Inspect the rollers for wear or damage.

3. Inspect the load backrest extension for cracks and damage.

4. If the lift truck is equipped with a sideshift carriage or attachment, inspect the parts for cracks and wear. Make sure the parts that fasten the sideshift carriage or attachment to the carriage are in good condition.

⚠ WARNING

Always wear the proper protective equipment including eye protection and petroleum-resistant gloves when handling hydraulic oil. Thoroughly wash oil from exposed areas of skin as soon as possible.

⚠ WARNING

Never check for leaks by putting hands on hydraulic lines or components under pressure. Hydraulic oil under pressure can be injected into the skin.

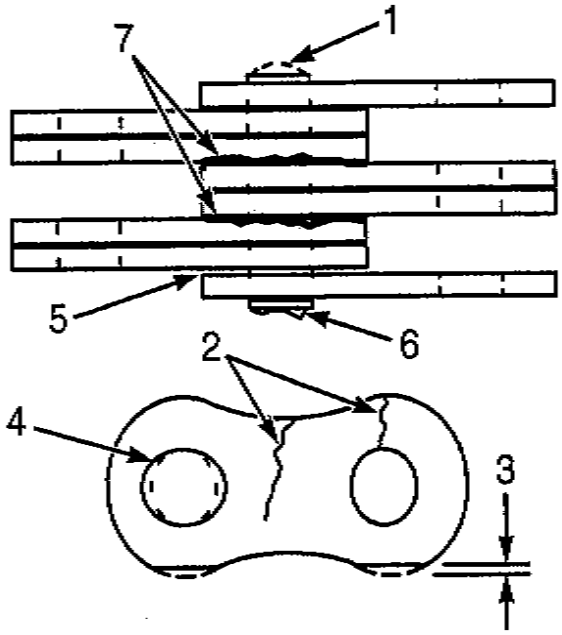
5. Visually inspect hoses/fittings for hydraulic leaks; hose covers for cuts, cracks, or exposed reinforcement; defective/broken clamping devices or sheaves; and proper tracking during operation. Adjust/repair/replace hose/components as necessary.

6. Check that lift chains are correctly lubricated. Use SAE 10W-30 engine oil to lubricate lift chains.

7. Inspect the lift chains for cracks or broken links and worn or turned pins. Lift chains must be replaced as a set. See Figure 26.

8. Inspect the chain anchors and pins for cracks and damage.

Make sure the lift chains are adjusted so that they have ual tension. **Adjustments or replacement of the lift ains must be done by authorized personnel.**



WORN PIN
CRACKS
EDGE WEAR (MAXIMUM 5% OF NEW)
HOLE WEAR
LOOSE LEAVES
DAMAGED PIN
CORROSION

Figure 26. Check the Lift Chains

Safety Labels

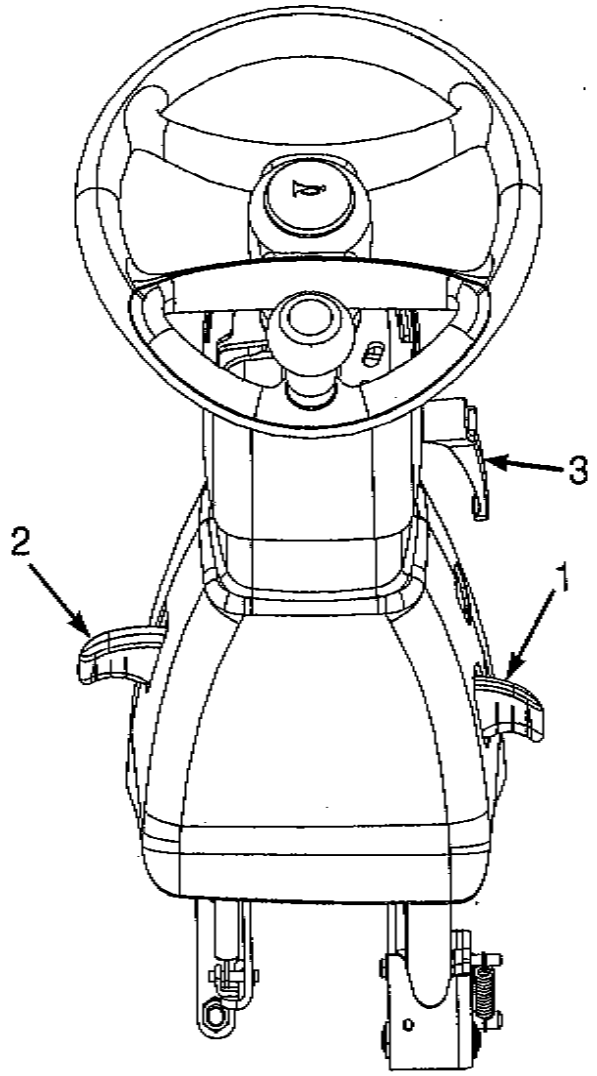
⚠ WARNING

Safety labels are installed on the lift truck to provide information about possible hazards. It is important that all safety labels are installed on the lift truck and can be read.

Check that all safety labels are installed in the correct locations on the lift truck. See the **Parts Manual** or **Frame** 100 YRM 1342 **Service Manual** for the correct locations of the safety labels.

Steering Column Tilt Memory Lever

Make sure the tilt memory lever for the steering column operates correctly. The tilt memory lever must NOT allow the column to move unless the tilt memory lever is released. See Figure 27.



NOTE: OPTIONAL TELESCOPIC STEERING COLUMN SHOWN.

1. STEERING COLUMN TILT POSITION LEVER
2. STEERING COLUMN TILT MEMORY LEVER
3. TELESCOPIC COLUMN LOCKING HANDLE

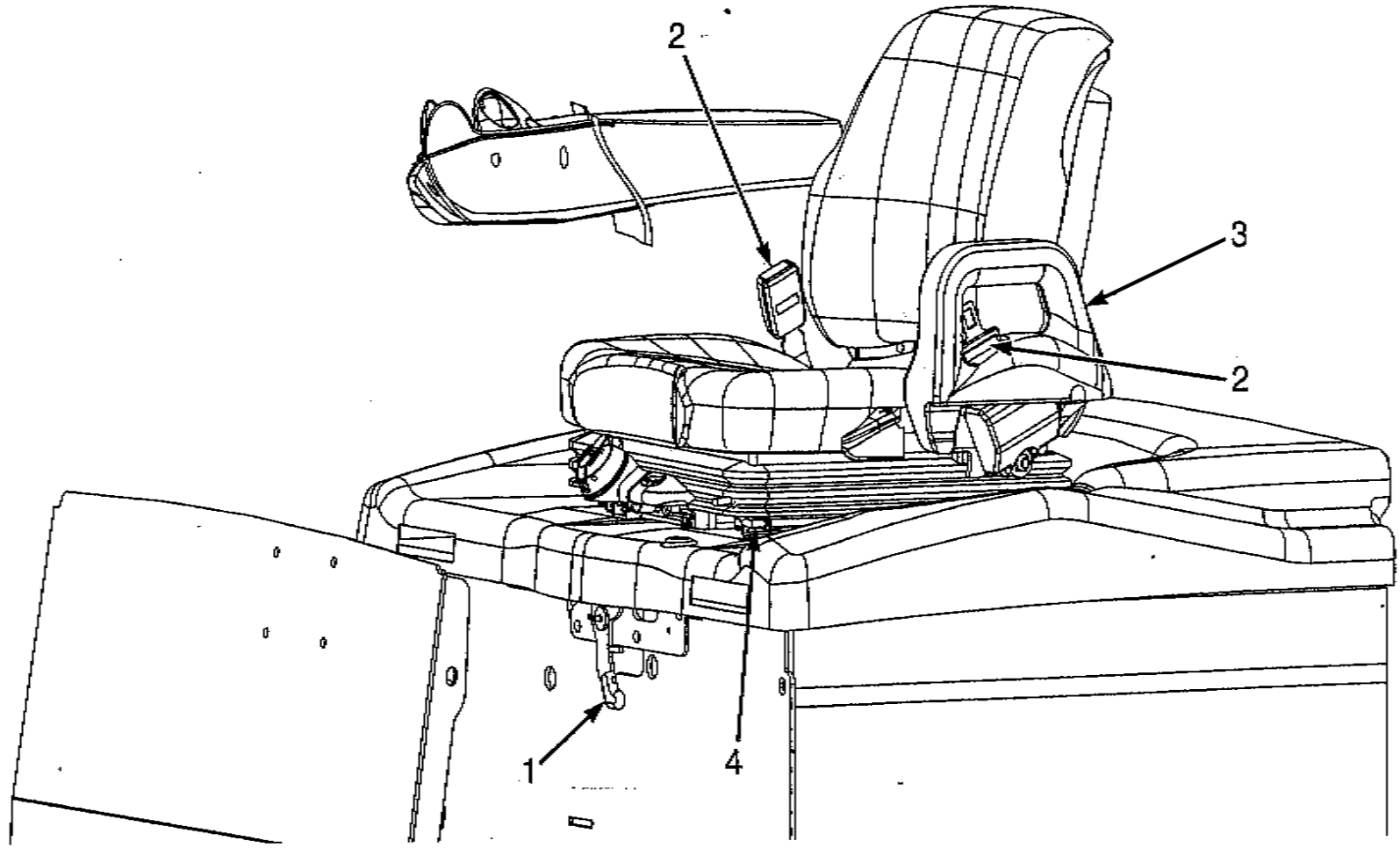
Figure 27. Steering Column Tilt Memory Lever

perator Restraint System

here is an indicator icon on the display panel for the seat lt. The icon is ON as described in the **Model Description** ction of this manual. The indicator icon can help the oper- or remember to fasten the seat belt.

he seat belt, hip restraint brackets, and the seat and seat ounting components are the parts of the operator restraint stem. See Figure 28. If the lift truck is equipped with manual hydraulic control levers, the control lever assembly and latch are also part of the operator restraint system. Each item must be checked to make sure it is attached securely, functions correctly and is in good condition.

Make sure the seat rails are not loose. See Figure 28. The seat rails must lock securely in position, but move freely when unlocked. The seat rails must be securely attached to the mounting surface.



1. HOOD LATCH HANDLE
2. SEAT BELT
3. HIP RESTRAINT BRACKETS
4. SEAT RAILS

Figure 28. Operator Restraint System

nergency Locking Retractor (ELR)

nen the ELR style seat belt is properly buckled across the erator, the belt will permit slight operator repositioning thout activating the locking mechanism. If the truck tips er, travels off a dock, or comes to a sudden stop, the lock- mechanism will be activated and hold the operator's lower rso in the seat. See Figure 28.

seat belt that is damaged, worn, or does not operate prop- y will not provide protection when it is needed. The end of e belt must fasten correctly in the latch. The seat belt must in good condition. Replace the seat belt if it is damaged worn.

OTE: The following seat belt operation checks must be erformed three times before replacing the seat belt assem- y:

With the hood closed and in the locked position, pull the seat belt slowly from the retractor assembly. Make sure the seat belt pulls out and retracts smoothly. If the seat belt does not pull out of the retractor assembly the internal latch may be locked. Pull firmly on the seat belt and hold for a moment to remove slack from the belt in the retractor. Release the seat belt. Seat belt will retract and the internal latch will unlock. If the seat belt cannot be pulled from the retractor assembly or the belt will not retract, replace the seat belt assembly.

- With the hood closed and in the locked position, pull the seat belt with a sudden jerk. Make sure the seat belt will not pull from the retractor assembly. If the seat belt can be pulled from the retractor when it is pulled with a sudden jerk, replace the seat belt assembly.
- With the hood in the open position, make sure the seat belt will not pull from the retractor assembly. If the seat belt can be pulled from the retractor, with the hood in the open position, replace the seat belt assembly.

Battery Restraint System

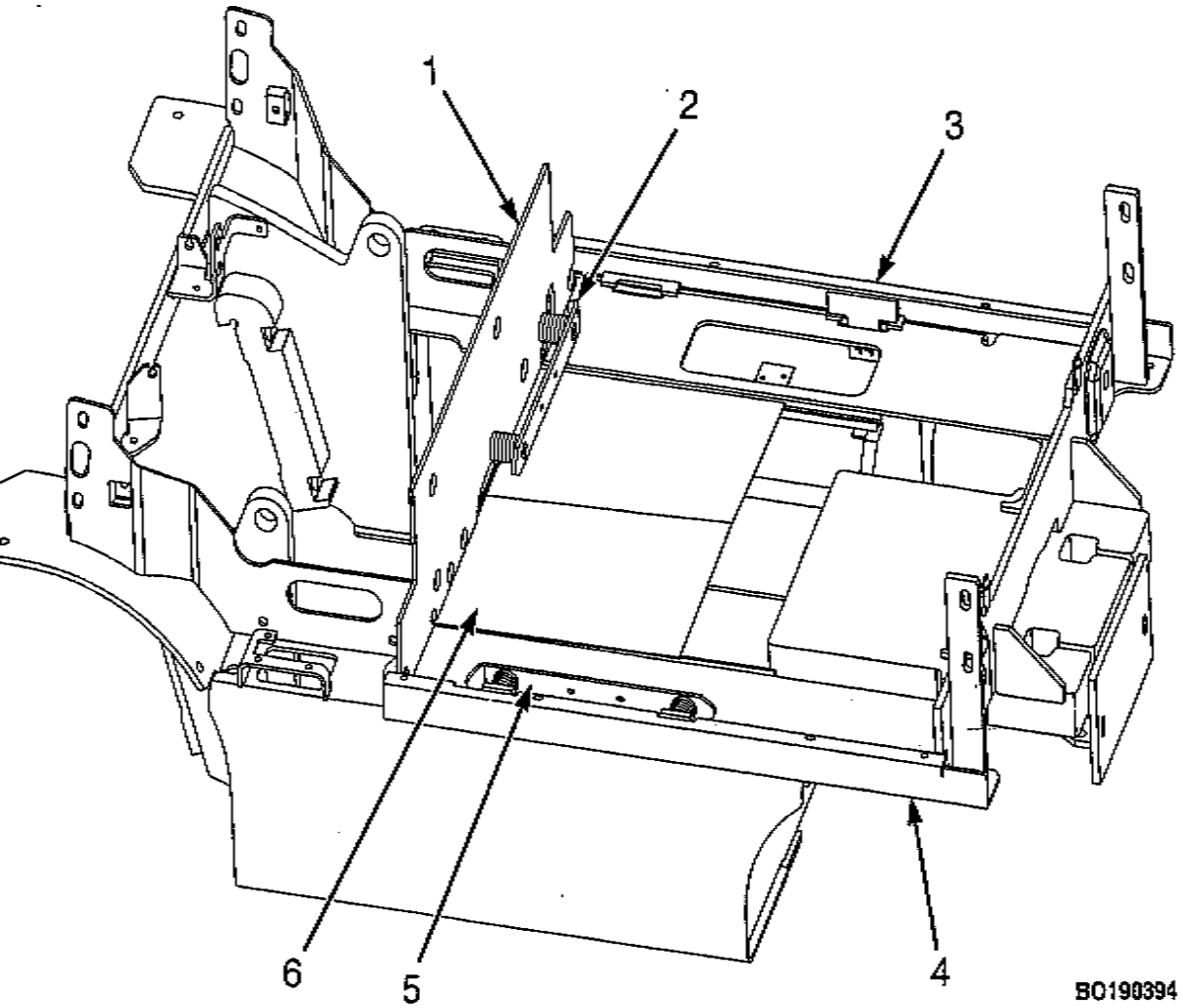
⚠ WARNING

The hood latch mechanism and battery restraint system must operate correctly before a lift truck is operated.

The battery restraint system is made up of front and side spacer plates and the right and left side battery covers (or battery gate if lift truck is equipped with optional side rollers). See Figure 29 and Figure 30. The hood and hood latch mechanism also help keep the battery within the battery compartment if a tipover occurs. The hood can be raised for access to the battery. Gas springs help raise and hold the hood in the up position.

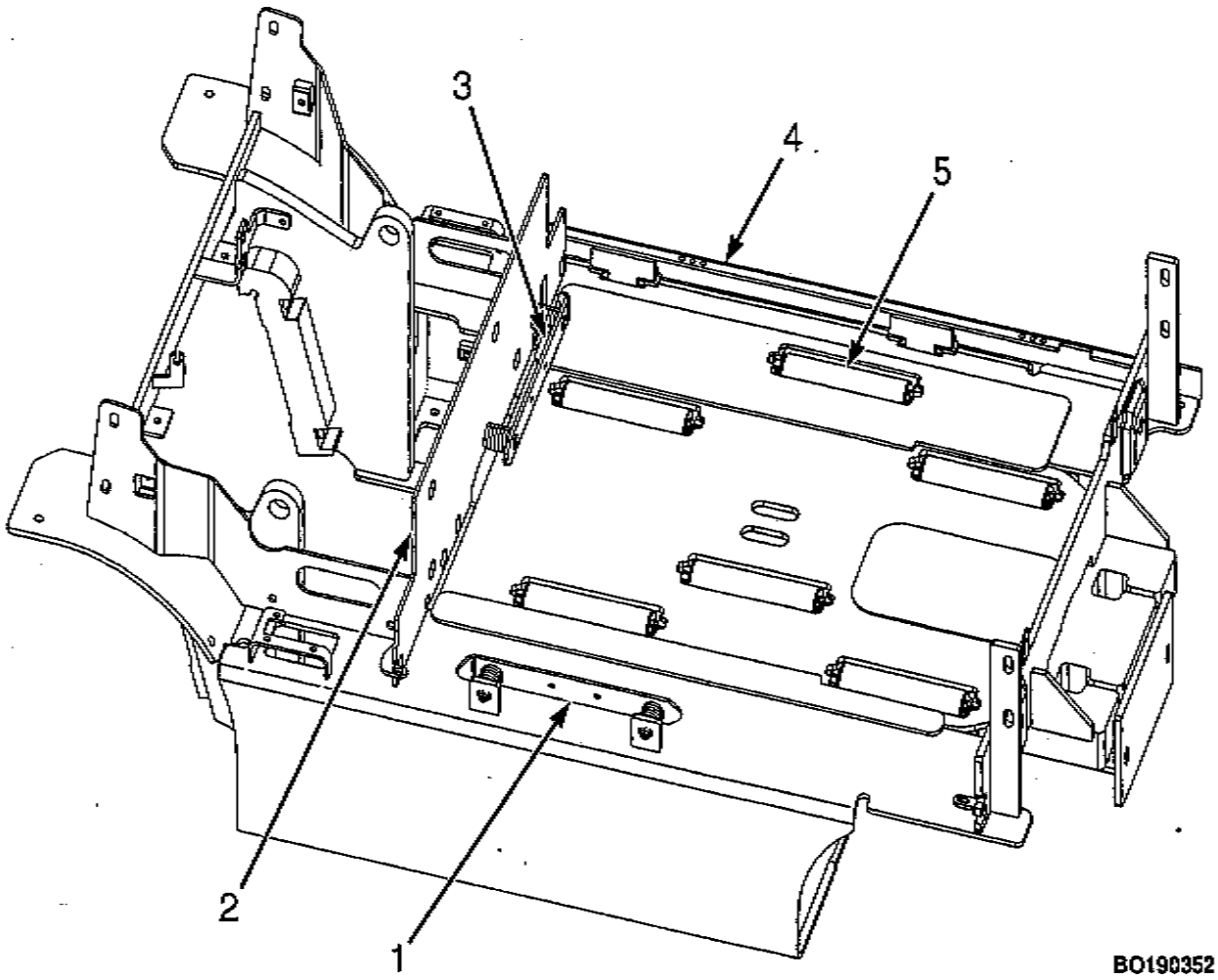
The front and side spacer plates are adjustable. The front spacer plate helps prevent the battery from moving forward and backward. The side spacer plate prevents side-to-side movement of the battery.

The battery restraint system must function so that the operator restraint system can operate correctly. Operation of the battery restraint system requires that the maximum movement allowed for the battery is 13 mm (0.50 in.) in any horizontal direction. This will reduce the risk of operator injury in a truck tipover. An adjustable battery spacer plate prevents the front-to-back movement of the battery. Batteries for this series of lift trucks must all have the same length dimension to just fit the battery compartment width. For correct battery sizes, see the **Battery Specifications** in the back of this manual.



1. FRONT BULKHEAD
2. FRONT SPACER PLATE
3. RIGHT SIDE BATTERY COVER

Figure 29. Standard Battery Restraint System



1. SIDE SPACER PLATE
2. FRONT BULKHEAD
3. FRONT SPACER PLATE

Figure 30. Optional Battery Restraint System With Side Rollers and Battery Gate

raise the hood, perform the following:

Use the tilt memory lever and tilt the steering column all
e way up.

Slide the seat all the way back, and if necessary, move the
mrest all the way back if lift truck is equipped with E-
ydraulic control levers.

If lift truck is equipped with manual hydraulic levers,
lease the latch for the control lever assembly and move the
sembly to the forward position before raising the hood. See
able 1.

OTE: The hood can be raised from either side of the lift
uck.

Release the hood latch. Raise hood to UP position using the hood handle. See Figure 31.

To close hood, lower the hood to the down position and pull the hood release handle towards left side of the truck until it clicks. Try to lift the hood to make sure the hood is locked down.

The hood must be locked in the down position during lift truck operation. The battery must have the front and side spacer plates correctly adjusted to prevent any horizontal movement of more than 13 mm (0.50 in.).