OSQ 126/162/192

Service Manual

SM-1201

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REV 1.0

CLARK Material Handling Co.
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Lexington, KY 40510
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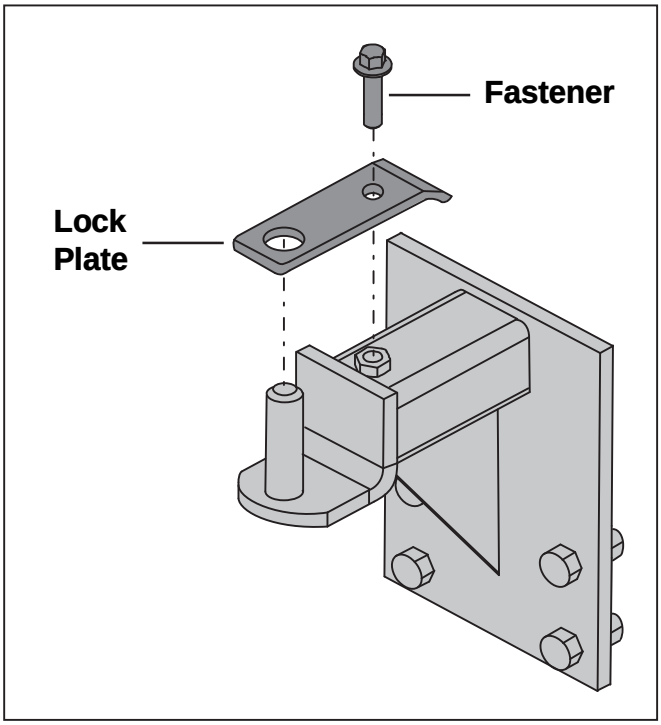
Section 3
Towing

Towing with the OSQ



1. Remove the fastener and plate from the tow hitch.
2. Install the cart or trailer to the tow hitch.

IMPORTANT!

The maximum towing capacity for all OSQ models is 2500 lbs (1133 kg). Do not exceed this weight to prevent damage to the vehicle.

3. Reinstall the fastener and lock plate to secure the item being towed.

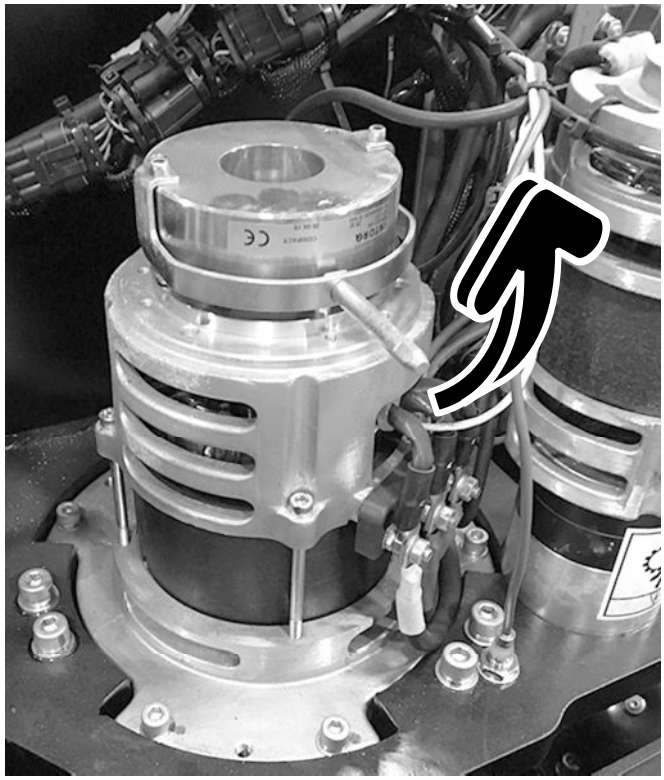
Towing the OSQ

IMPORTANT!

Attempting to move the vehicle with the EM-brake engaged will cause damage to the vehicle.

If the vehicle becomes disabled and needs to be manually moved or towed, the electromagnetic (EM) brake MUST be disabled before attempting to move vehicle.

Attempting to move the vehicle will cause damage to the vehicle's brake system.



To release the EM brake:

- Lift up on the lever located on top of the drive motor.

Group PM

Planned Maintenance

Planned Maintenance Overview.....Section 1

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Section 1
Planned Maintenance Overview

Planned Maintenance

The Planned Maintenance (PM) consists of periodic visual and operational checks, vehicle inspection, lubrication, and scheduled maintenance intended to find issues early, discover malfunctioning components, and allow for optimal operational performance of the vehicle. Performing routine PM can save overall time and money for the customer and help prevent major repairs, reduce downtime, and drastically increase the vehicle's life and reliability.

IMPORTANT!

All PM inspections, service, and maintenance work must be performed by a qualified and authorized technician.

The operator should perform the Daily Inspection (DI) procedure described in the Operator's Manual and refer any required service to a qualified CLARK service technician to perform the Planned Maintenance and any additional needed maintenance.

IMPORTANT!

All vehicle service records, including the Frequent and Annual Inspections, must be maintained for a minimum of four (4) years.

All service and service intervals in this manual are based on **normal** vehicle usage of eight (8) hours per day, five (5) days per week. If the vehicle is used in excess of this, then the frequency of inspection and maintenance should be adjusted accordingly. If you have questions or concerns about determining your vehicle's PM plan, please contact your nearest CLARK dealer for any assistance.

Always use genuine CLARK replacement parts when servicing or maintaining your OSQ support vehicle.

IMPORTANT!

All replacement parts must be identical or equivalent to the original component being replaced.

Required Inspections

Frequent Inspections

The owner and user are **required** by ANSI A92.6 to ensure Frequent Inspections of the CLARK OSQ vehicle are performed whenever one of the following occurs:

- The vehicle was purchased used, unless it's determined that the frequent and annual inspections are current.
- The vehicle has been in service for three (3) months or 150 hours, whichever comes first.
- The vehicle has been out of service for a period longer than three (3) months.

Annual Inspections

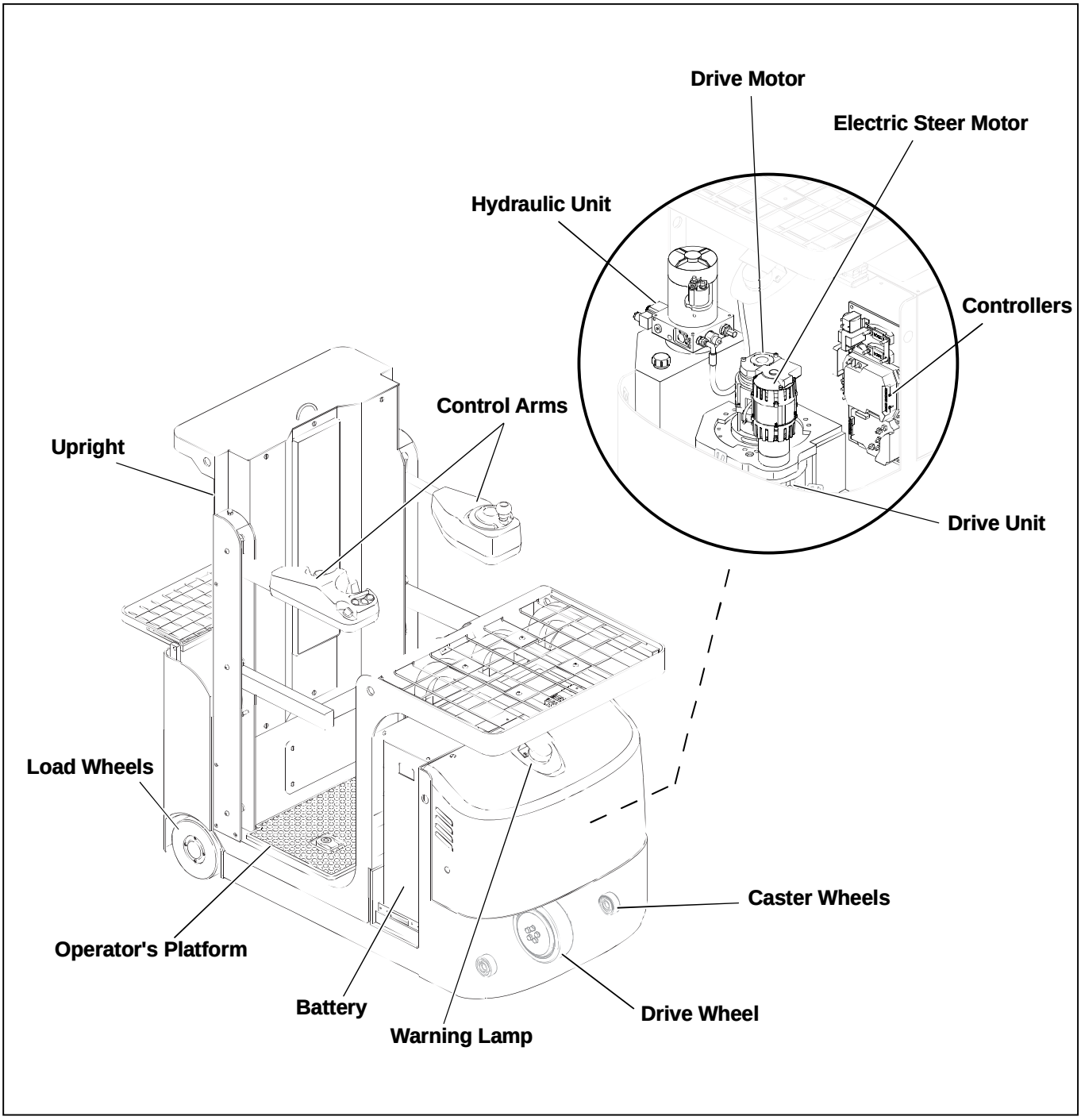
The owner and user are **required** by ANSI A92.6 to ensure Annual Inspections of the CLARK OSQ vehicle are performed every 13 months or 700 hours from the date of the previous annual inspection, whichever occurs first.

NOTE

Refer to *Group PM, Section 3* of this manual for an example of the **CLARK OSQ Frequent / Annual Inspection** form.

Copies of this form are available from your local CLARK dealer.

OSQ Component Location

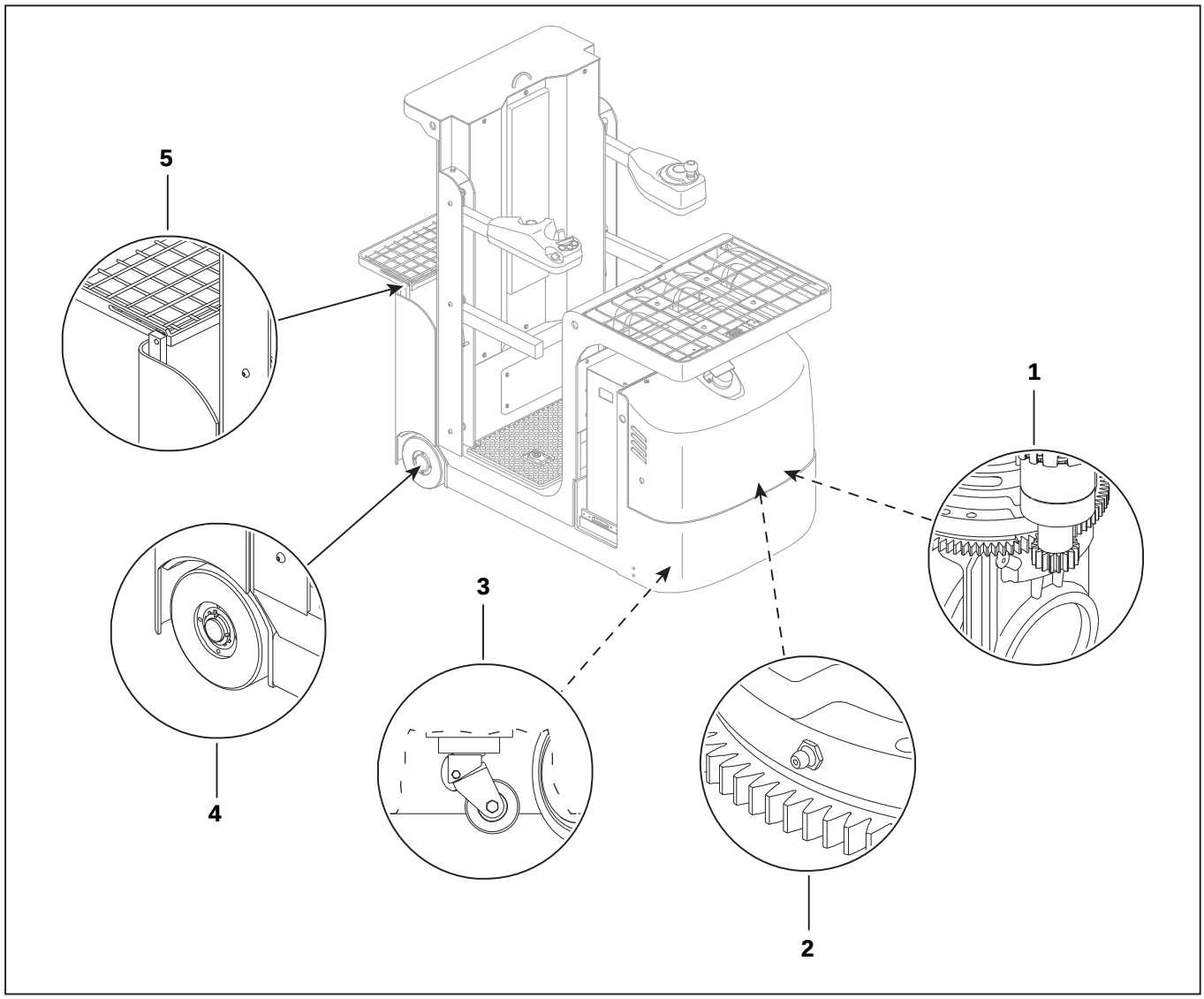


Section 2
Service and Lubrication Schedule

Interval	Daily	Monthly	Every 3 Months	Every 6 Months	Yearly
Operating Hours	**8-10**	**50-250**	**450-500**	**900-1000**	**2000**
Controls and Switches					
Check control arm switch and button function	■				
Check alarm function	■				
Check emergency stop switch function	■				
Check limit switch function	■				
Check cables and terminals for damage		■			
Check controller and contactor mounting				■	
Check fault information and operating hours	■				
Battery and Drive System					
Check battery cables for damage or corro-sion			■		
Check the battery charger and its connector			■		
Check motor mounting bolts, tighten as needed				■	
Check motor cable connections				■	
Check steering for bearing noise				■	
Check drive unit fluid level		■			
Check drive unit for leaks		■			
Check the wheels for damage and wear	■				
Check the load wheel bearings and mounting				■	
Check travel speed				■	
Lubricate the steering bearing		■			
Lubricate the large ring gear		■			
Lubricate the drive motor bearings		■			
Replace drive unit fluid					■

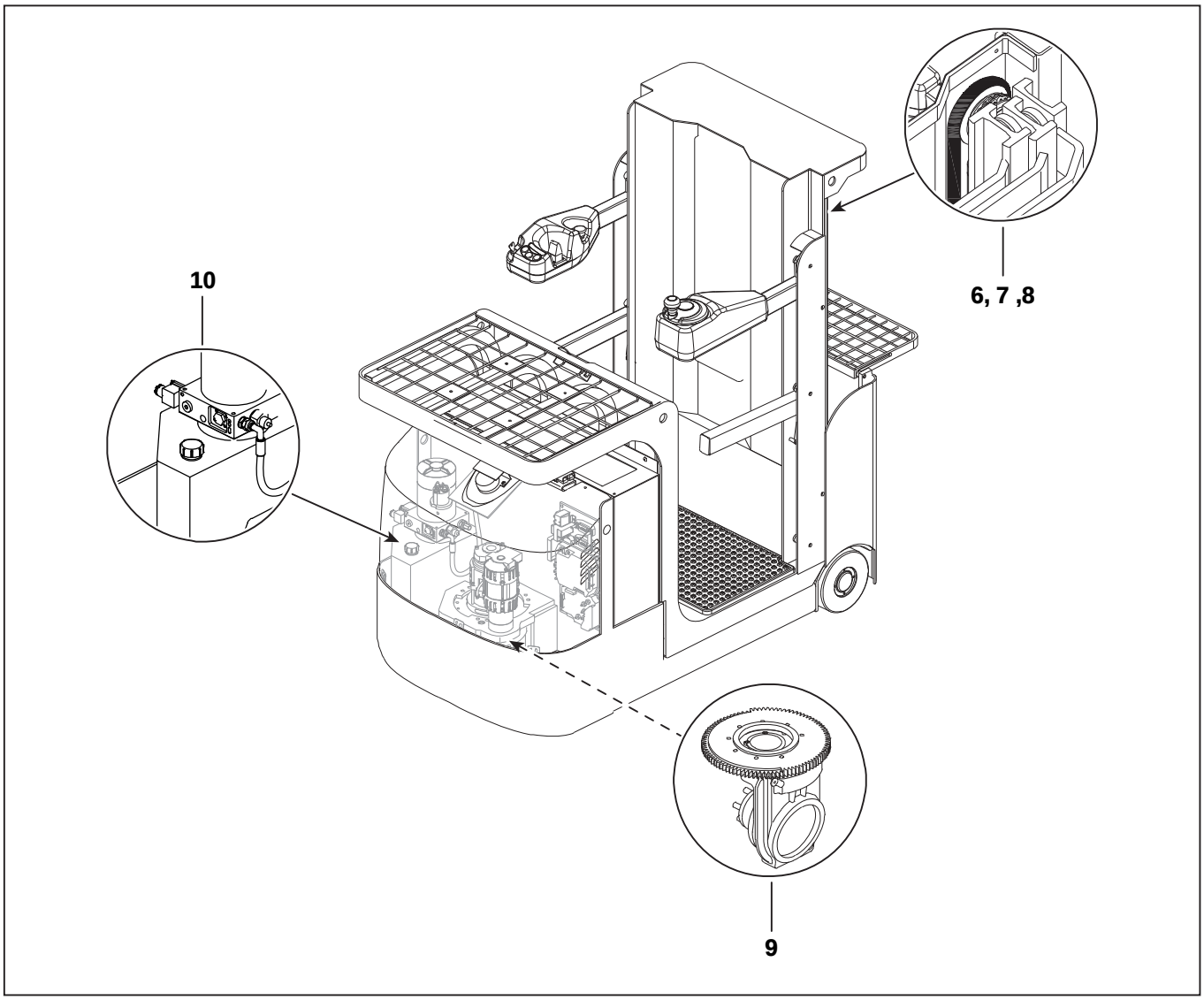
Interval	Daily	Monthly	Every 3 Months	Every 6 Months	Yearly
Operating Hours	**8-10**	**50-250**	**450-500**	**900-1000**	**2000**
Hydraulic System					
Check for proper hydraulic system function	■				
Check hoses, pipes, and fittings for leaks and damage			■		
Check cylinders for leaks			■		
Check for cylinder damage				■	
Check the reservoir tank for leaks				■	
Check the hydraulic fluid level			■		
Check the emergency lowering valve	■				
Check the relief pressure					■
Replace the hydraulic fluid and filter					■
Braking System					
Check for proper brake function	■				
Check EM-brake air gap (0.2 mm to 0.4 mm)				■	
Check EM-brake fasteners				■	
Check braking distance (36" or 92 cm)				■	
Lift System					
Check upright for damage			■		
Check lifting chains for stretch and wear			■		
Check safety guard and cover			■		
Check rollers for correct adjustment			■		
Check lifting and lowering speed			■		
Lubricate the lifting chains		■			
Lubricate the rollers		■			
Lubricate the upright rails		■			
Miscellaneous					
Check decals, manuals, and data plate are correct and installed with the vehicle			■		
Check casters for wear			■		
Check front stabilizer gap (<1/2" or 13 mm)		■			

Lubrication Points (1/2)



Item	Component	Service Interval
1	Steering Motor Gear	150 hours or monthly
2	Drive Unit Steering Bearing	150 hours or monthly
3	Stabilizer Caster Wheels	150 hours or monthly
4	Load Wheels	150 hours or monthly
5	Rear Pick Tray	250 hours or monthly

Lubrication Points (2/2)



Item	Component	Service Interval
6	Upright Rails	150 hours or monthly
7	Upright Rollers	250 hours or monthly
8	Lifting Chain	250 hours or monthly
9	Drive Unit	2000 hours or yearly
10	Hydraulic Unit	2000 hours or yearly