

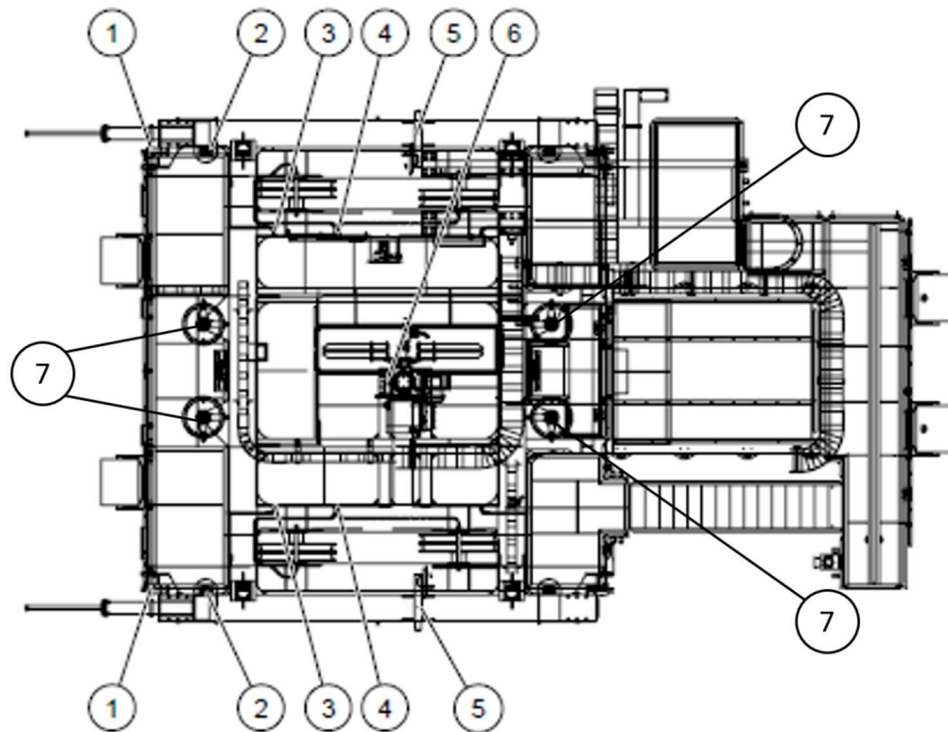
## 500/3000hr Lube PM

Crane: Sav \_\_\_\_\_ Date of Completion: \_\_\_\_/\_\_\_\_/\_\_\_\_

Crane Hours: \_\_\_\_\_ Technicians: \_\_\_\_\_

### I. Lubrication Points for the Trolleys

#### A. Main Trolley



*Figure 1 – Lubrication points for the main trolley*

Using the diagram above, please work through *Table 1* lubricating all necessary points.

*Table 1 – Lubrication intervals and requirements for the main trolley*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Rope changing sheaves	4	Lubricate	EP2	500hr		
2	Guide Rollers	4	Lubricate	EP2	500hr	Automatically lubricated	

3	Trolley wheel bearings	8	Lubricate	EP2	500hr	Automatically lubricated	
4	Hoist rope sheave bearings	8	Lubricate	EP2	500hr	Automatically lubricated	
5	Storm locking pins	2	Lubricate	Spray Grease	500hr	Lubricate with a brush	
6	Spreader cable reel gear reducer	1	Change the oil	EP220	3000hr	Oil quantity 11.9 gal	
7	Trolley drive rope sheaves	4	Lubricate	EP2	500hr		

## B. Auxiliary Trolleys

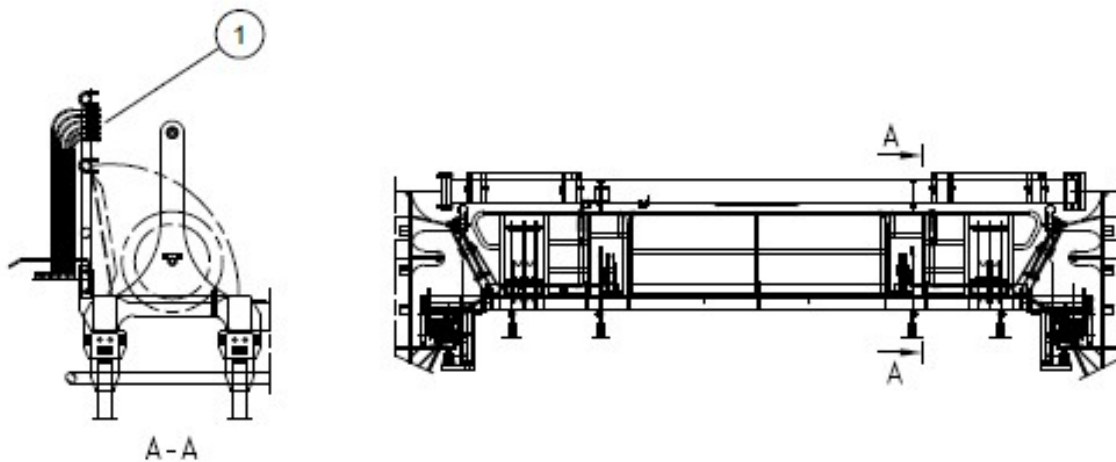


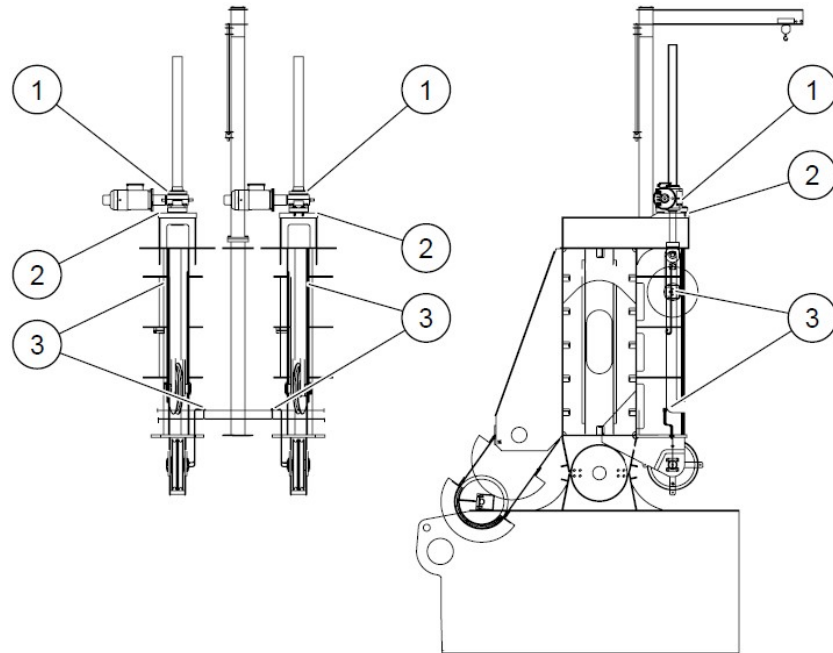
Figure 2 – Lubrication points for the auxiliary trolleys

Using the diagram above, please work through *Table 2* lubricating all necessary points.

Table 2 – Lubrication intervals and requirements for the auxiliary trolleys

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Auxiliary trolleys	2	Lubricate	EP2	500hr	24 grease nipples per auxiliary trolley	

## C. Trolley Rope Tightening Machinery



*Figure 3 – Lubrication points for the trolley rope tightening machinery*

Using the diagram above, please work through *Table 3* lubricating all necessary points.

*Table 3 – Lubrication intervals and requirements for the main trolley*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Screw of the rope tightening machinery	2	Lubricate	Klubersynth GH 6-680	500hr	Lubricate with a brush	
2	Bearing	2	Lubricate	EP2	500hr		
3	Sheave bearings	6	Lubricate	EP2	500hr		

## II. Lubrication Points for the Bogies and Lower Parts of Crane

### A. Bogies

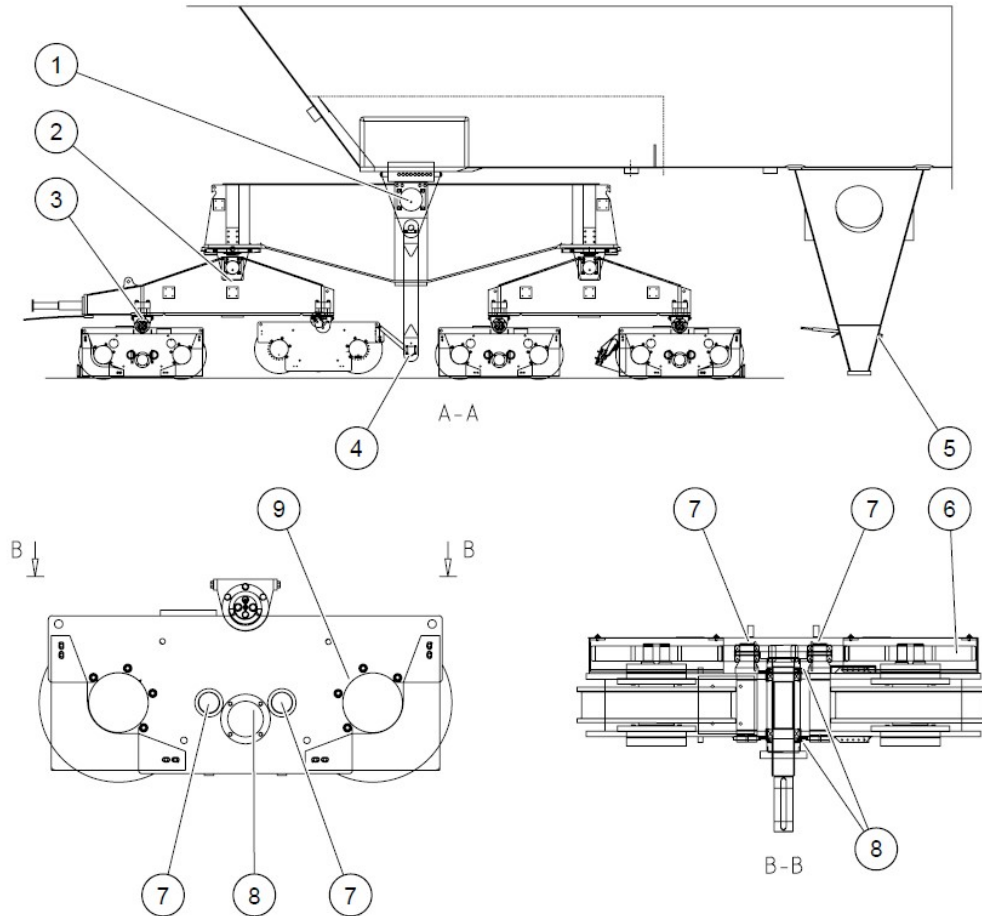


Figure 4 – Lubrication points for the bogies

Using the diagram above, please work through *Table 4* lubricating all necessary points.

Table 4 – Lubrication intervals and requirements for the bogies

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Uppermost hinges	4	Lubricate	Spray Grease	500hr		
2	Middle hinges	8	Lubricate	Spray Grease	500hr		
3	Bogie hinges	16	Lubricate	Spray Grease	500hr		

4	Wind locking pins	8	Lubricate	Spray Grease	500hr		
5	Storm locking mechanism	2	Lubricate	Spray Grease	500hr		
6	Gear wheels	60	Lubricate	Gear Lube	500hr		
7	Intermediate gear bearings	24	Lubricate	EP2	500hr		
8	Secondary shaft bearings	24	Lubricate	EP2	500hr		
9	Gantry wheel bearings	64	Lubricate	EP2	500hr		

## B. Gantry Traveling Machinery

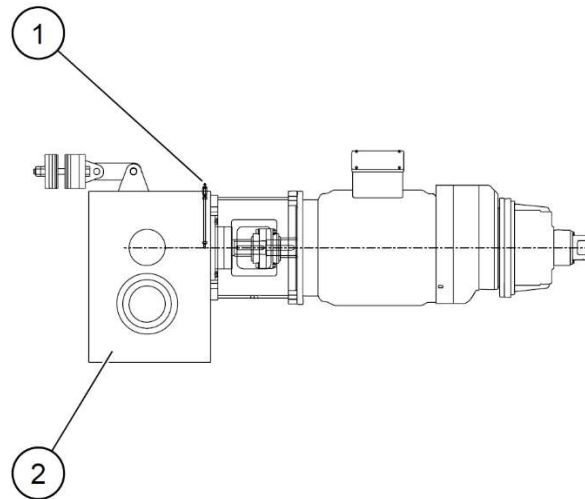


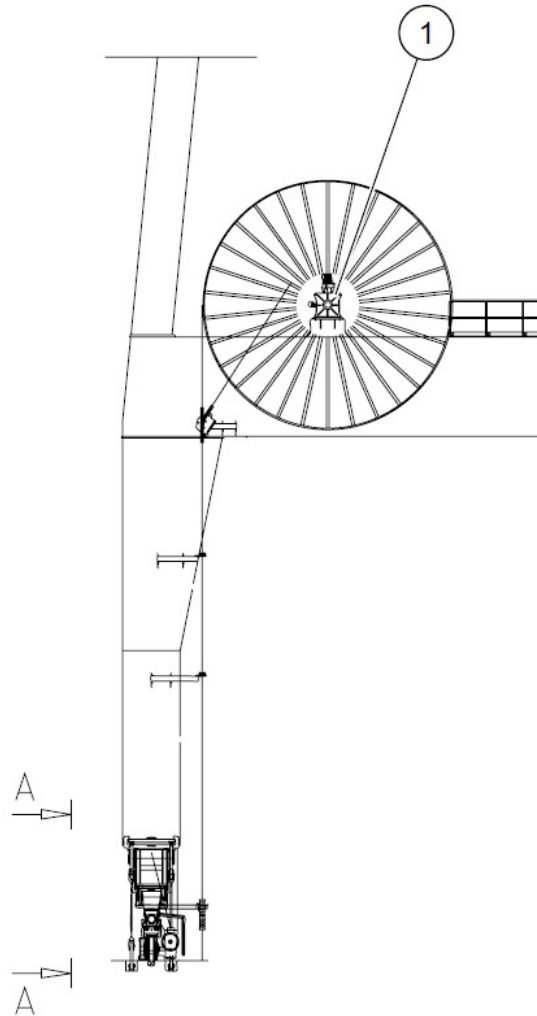
Figure 5 – Lubrication points for the gantry traveling machinery

Using the diagram above, please work through *Table 5* lubricating all necessary points.

Table 5 – Lubrication intervals and requirements for the gantry traveling machinery

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Gearbox's primary shaft bearing	12	Lubricate	EP2	500hr		
2	Gearbox	12	Change the oil	EP220	3000hr	Oil quantity 2.9 gal	

## C. Gantry Traveling Machinery



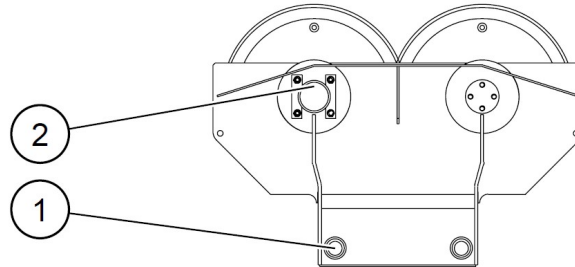
*Figure 6 – Lubrication points for the gantry cable reel*

Using the diagram above, please work through *Table 6* lubricating all necessary points.

*Table 6 – Lubrication intervals and requirements for the gantry cable reel*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Cable reel gearbox	1	Change the oil	EP220	3000hr	Oil quantity 11.9 gal	

### III. Lubrication Points for the Head Block



*Figure 7 – Lubrication points for the sheave head block*

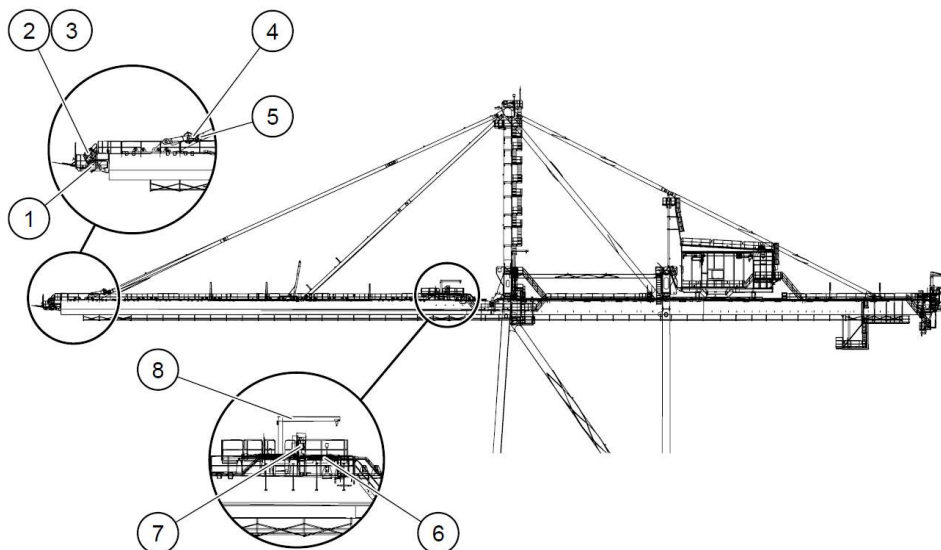
Using the diagram above, please work through *Table 7* lubricating all necessary points.

*Table 7 – Lubrication intervals and requirements for the sheave head block*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Attachment sleeve	4	Lubricate	Spray Grease	500hr		
2	Hoist rope sheave bearings	4	Lubricate	EP2	500hr		

### IV. Lubrication Points for the Upper Portion of the Crane

#### A. Boom Tip and TLS station



*Figure 8 – Lubrication points for the boom tip and TLS station*

Using the diagram above, please work through *Table 8* lubricating all necessary points.

*Table 8 – Lubrication intervals and requirements for the boom tip and TLS station*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Main hoist rope sheave bearings	4	Lubricate	EP2	500hr		
2	Auxiliary rope sheave bearings	2	Lubricate	EP2	500hr		
3	Trolley rope sheave bearings	4	Lubricate	EP2	500hr		
4	Boom hoist rope sheave bearings	6	Lubricate	EP2	500hr		
5	Upper front stay hinges	4	Lubricate	EP2	500hr		
6	Screw of the micro-motion machinery	4	Lubricate	Klubersynth GH 6-680	500hr		
7	Worm gear	4	Lubricate	EP460	500hr		



## B. Hinge Point and Apex

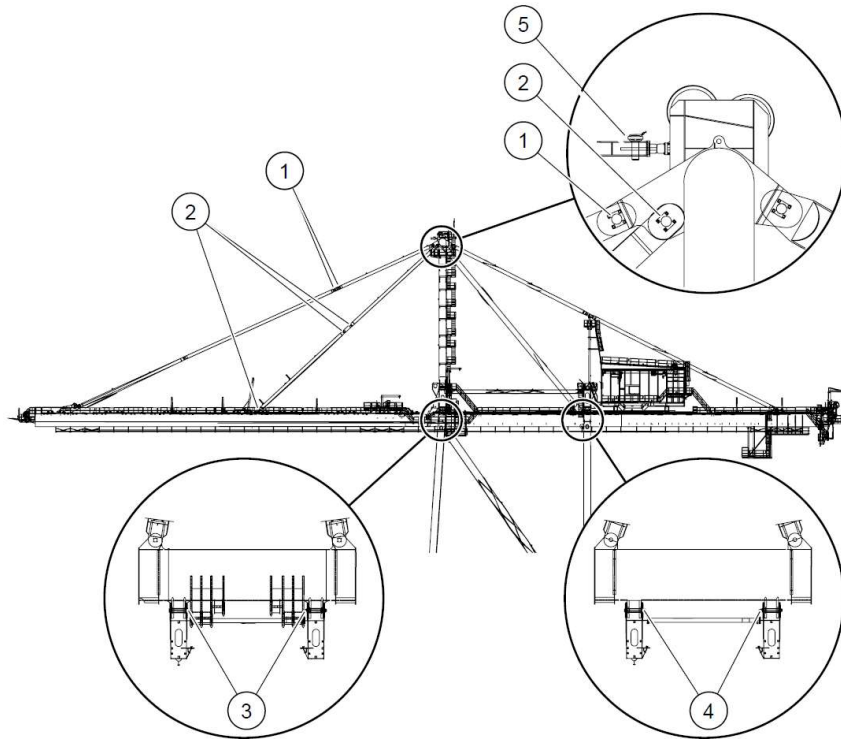


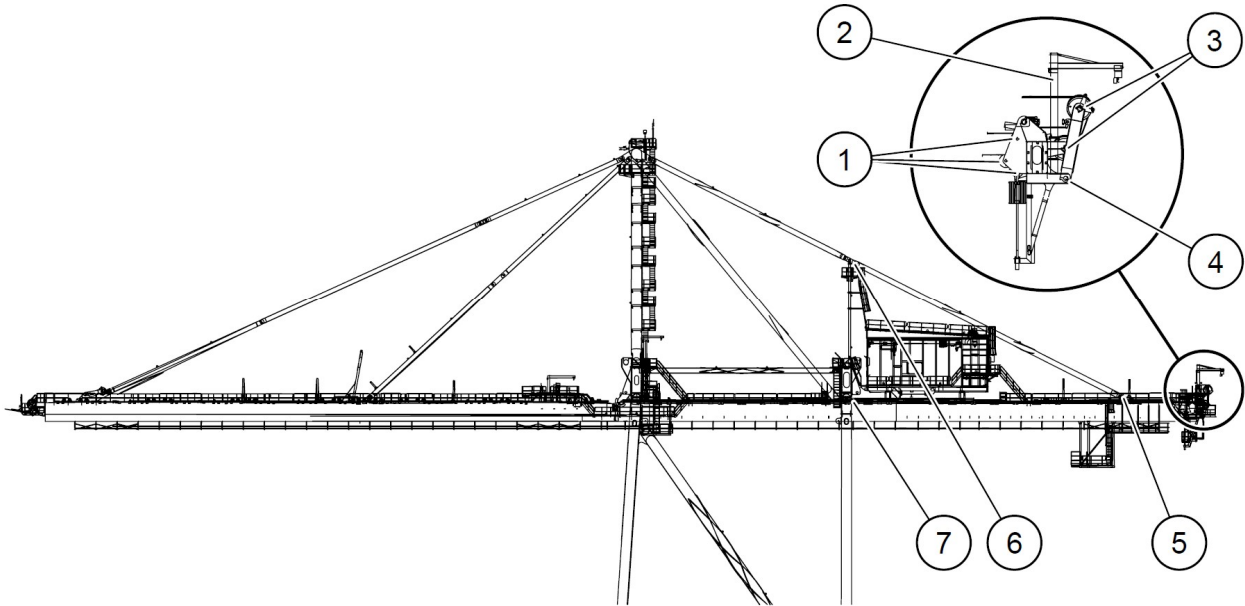
Figure 9 – Lubrication points for the hinge point and apex

Using the diagram above, please work through *Table 9* lubricating all necessary points.

Table 9 – Lubrication intervals and requirements for the hinge point and apex

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Upper front stay hinges	4	Lubricate	EP2	500hr		
2	Lower front stay hinges	4	Lubricate	EP2	500hr		
3	Front hanger hinge joints	2	Lubricate	EP2	500hr		
4	Rear hanger hinge joints	2	Lubricate	EP2	500hr		
5	Storm locking mechanism	1	Lubricate	EP2	500hr		

## C. Shoulder Stays and Backreach



*Figure 10 – Lubrication points for the shoulder stays and backreach*

Using the diagram above, please work through *Table 10* lubricating all necessary points.

*Table 10 – Lubrication intervals and requirements for the shoulder stays and backreach*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Auxiliary rope sheave bearings	6	Lubricate	EP2	500hr		
3	Main hoist rope sheave bearings	8	Lubricate	EP2	500hr		
4	Snag arm joints	2	Lubricate	EP2	500hr		
5	Back stays	2	Lubricate	EP2	500hr	Grease all pins	
6	Back stay supports	2	Lubricate	EP2	500hr	Grease all pins	
7	Hanger hinge joints	2	Lubricate	EP2	500hr	Grease all pins	

## V. Lubrication Points for the Machinery Room

### A. Main Hoisting Machinery

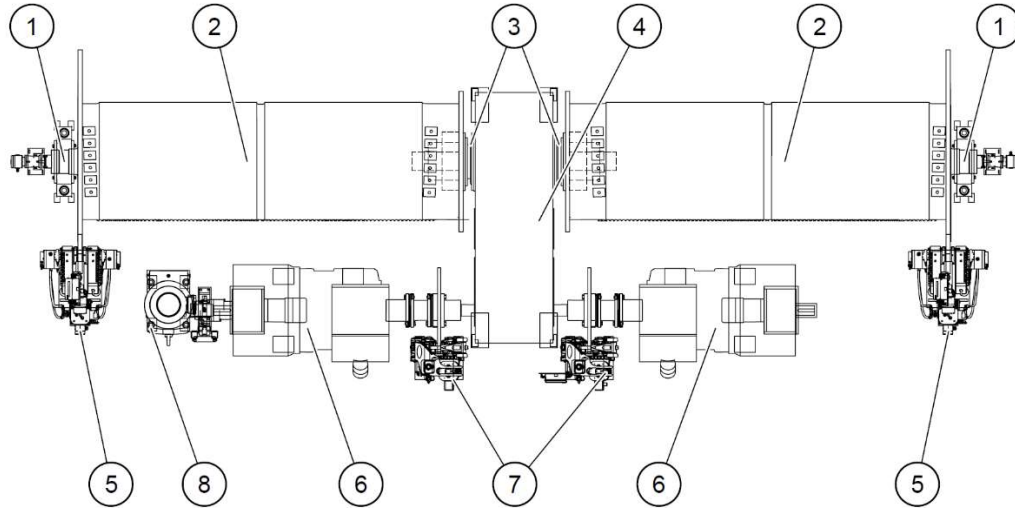


Figure 11 – Lubrication points for the main hoisting machinery

Using the diagram above, please work through *Table 11* lubricating all necessary points.

Table 11 – Lubrication intervals and requirements for the main hoisting machinery

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Drum bearing	2	Lubricate	EP2	500hr		
2	Wire rope	4	Lubricate	Bio Lube	500hr	Lubricate with a brush	
3	Drum coupling	2	Lubricate	Citgo Coupling Grease	500hr		
4	Gearbox	1	Change the oil	EP220	3000hr	Oil quantity 92.5 gal	
5	Holding brake hydraulic unit	2	Change the oil and the filters	ISO VG 46 Hydraulic Oil	3000hr	Maintenance-free. Maintenance required only if leakage or damage is detected. After maintenance, bleed the brake before use.	

6	Motor bearing	4	Lubricate	EP2	3000hr	Lubricate the bearings while the motor is running. Stay away from moving and rotating parts of the machinery.	
7	Brake thrusters	2	Check the oil level	ISO VG 10 Hydraulic Oil	3000hr	Maintenance-free. Maintenance required only if leakage or damage is detected. After maintenance, bleed the brake before use.	
8	Auxiliary drive gearbox	1	Change the oil	EP220	3000hr	Check the oil level from the oil level plug.	

## B. Boom Hoisting Machinery

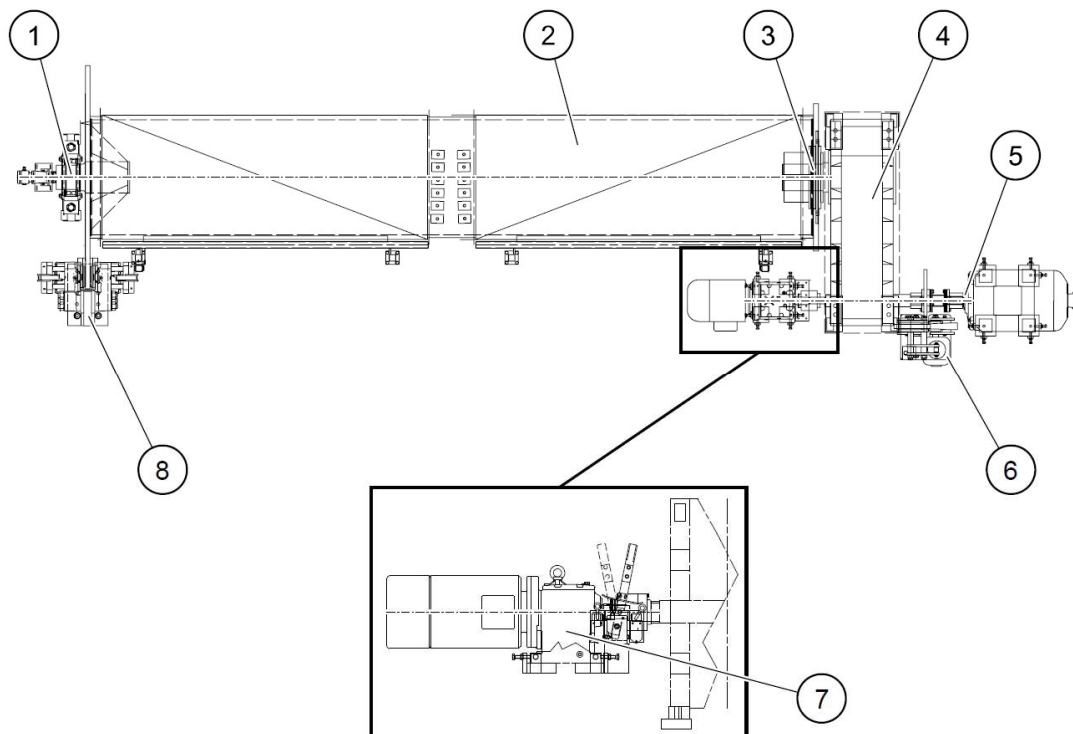


Figure 12 – Lubrication points for the boom hoisting machinery

Using the diagram above, please work through *Table 12* lubricating all necessary points.

*Table 12 – Lubrication intervals and requirements for the boom hoisting machinery*

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Drum bearing	1	Lubricate	EP2	500hr		
2	Wire rope	2	Lubricate	Bio Lube	500hr	Lubricate with a brush	
3	Drum coupling	1	Lubricate	Citgo Coupling Grease	500hr		
4	Gearbox	1	Change the oil	EP220	3000hr	Oil quantity 66 gal	
5	Motor bearing	2	Lubricate	EP2	3000hr	Lubricate the bearings while the motor is running. Stay away from moving and rotating parts of the machinery.	
6	Brake thrusters	1	Check the oil level	ISO VG 10 Hydraulic Oil	3000hr	Maintenance-free. Maintenance required only if leakage or damage is detected. After maintenance, bleed the brake before use.	
7	Auxiliary drive gearbox	1	Change the oil	EP220	3000hr	Check the oil level from the oil level plug.	
8	Holding brake hydraulic unit	1	Change the oil and the filters	ISO VG 46 Hydraulic Oil	3000hr	Maintenance-free. Maintenance required only if leakage or damage is detected. After maintenance, bleed the brake before use.	

### C. Trolley Traveling Machinery

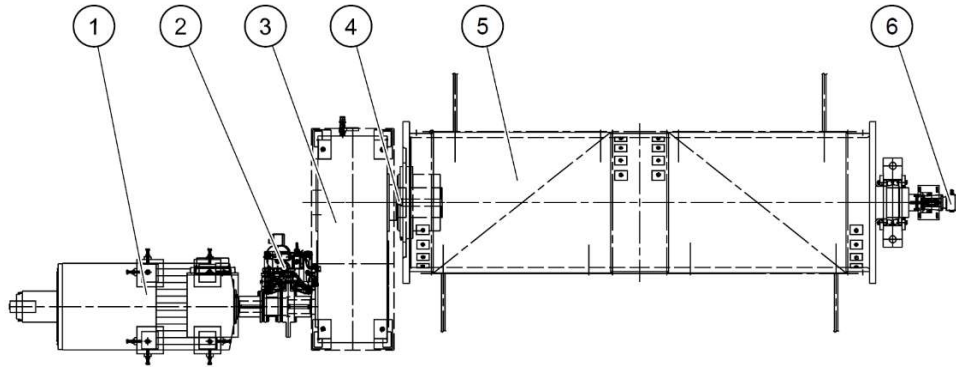


Figure 13 – Lubrication points for the trolley traveling machinery

Using the diagram above, please work through *Table 13* lubricating all necessary points.

Table 13 – Lubrication intervals and requirements for the trolley traveling machinery

Ref.	Component	Qty/ Crane	Procedure	Lubricant	Period	Other Details	Completed (✓)
1	Motor bearing	2	Lubricate	EP2	3000hr	Lubricate the bearings while the motor is running. Stay away from moving and rotating parts of the machinery.	
2	Brake thrusters	1	Check the oil level	ISO VG 10 Hydraulic Oil	3000hr	Maintenance-free. Maintenance required only if leakage or damage is detected. After maintenance, bleed the brake before use.	
3	Gearbox	1	Change the oil	EP220	3000hr	Oil quantity 66 gal	
4	Drum coupling	1	Lubricate	Citgo Coupling Grease	500hr		
5	Wire rope	2	Lubricate	Bio Lube	500hr	Lubricate with a brush	
6	Drum bearing	1	Lubricate	EP2	500hr		