



6 PREVENTATIVE MAINTENANCE

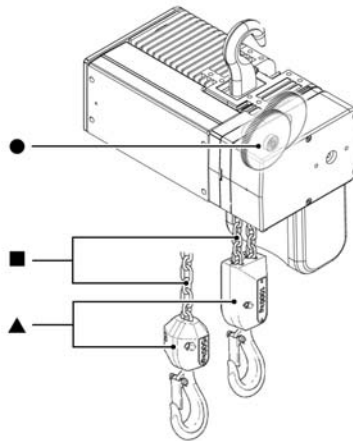
6.1 Maintenance and Inspection Table

Check	Interval	Qualification of personnel
Visual inspection of the brake operation - for holding and releasing	Daily	Operator
Visual inspection of the load chain	Daily	Operator
Suspension of the pendant station	Daily	Operator
Cleanliness and lubrication of the chain	Monthly	Operator
Check the operation of the upper and lower limit switches	Monthly	Operator
Inspect the chain and measure for wear	Every 3 months	Qualified Inspector
Inspect the hooks and measure for wear	Every 3 months	Qualified Inspector
Tightness of the load block screws & nuts	Every 3 months	Operator
Check the locking plate screws for top hook or coupling	Every 3 months	Operator
Adjustment of the slip clutch and hoist brake	3 to 6 months	Qualified mechanic
Lubrication of open wheel gearing	3 to 6 months	Qualified mechanic
Tightness of wire terminal screws	Semi-annually	Qualified mechanic
Lubrication of the 2-fall load block idler sprocket	Annually	Operator
Tightness of all screws and check for signs of corrosion	Annually	Qualified mechanic
Clean motor cooling fins	Annually	Qualified mechanic
Lubrication of the gears	Annually	Qualified mechanic
Function labels on pendant station for legibility	Annually	Qualified Inspector
Inspect the thrust bearing in the load block	Annually	Qualified mechanic

CAUTION! These intervals shall be shortened if the hoist is used heavily with maximum loads or in extreme ambient conditions.



6.2 Lubrication



Lubrication chart

Lube Point	Specifications	Possible brands	Quantity
Chain ■	Oil or liquid grease	Chain lubricating fluid (Ceplattyn or similar) EP-90	As required
Idler sprocket ▲ Slide bearing + bearing	Grease (without MoS2) KP 2 (DIN 51 502) Soap-based lithium Approx. drip point + 500°F Worked penetration 509-563°F Operating temperature - 4°F - +266°F	BP: BP Energrease LS - EP 2 Esso: Unirex N2 Mobil: Mobilgrease HP Shell: Shell Alvanio EP Grease 2	As required
Gears ●	Oil EP220	Mobil: L-CKC220 BP: Energol XP220 Shell: Omala 150/220	1.6 liters 1 ¾ qts

Open Wheel Gearing: EP1 Mobilux or equivalent.



6.3 Recommended Technical Support for Various spare parts.

SPARE PART	REPLACED BY
Upper chain guide	Qualified electrician & mechanic
Output shaft	Qualified electrician & mechanic
PG cable gland	Qualified electrician
Gear input shaft + adjusting nuts	Qualified mechanic
Motor end cap	Qualified mechanic
Gearing (1st/2nd stage)	Qualified electrician & mechanic
Brake cap/end cap sealing	Qualified mechanic
Other seals and O-rings	Qualified mechanic
Brake-limiter	Qualified electrician
Brake end cap	Qualified mechanic
Lower chain guide	Qualified mechanic
Rubber buffer	Qualified mechanic
Electric box	Qualified electrician
PC-board	Qualified electrician
Plugs	Qualified electrician
Chain	Qualified mechanic
Chain bucket	Qualified mechanic
Slack fall stop	Qualified mechanic
Suspension hook	Qualified mechanic
Hook block (1/1; 2/1)	Qualified mechanic
Control box	Qualified electrician

Once a part has been replaced, check the operation of the hoist per Section 3.

6.4 Screw Tightening Torque (lb-ft) Specification

	M5	M6	M8	M10	M12
Standard screws	4	7	18	35	61
Self-tapping screws	4	6	15	30	53



6.5 Troubleshooting

Problem	Possible Cause	Possible Solution
Hoist does not lift or lower load	Emergency stop button is activated	Deactivate button
	Blown fuse	Replace the fuse
	Pendant plug pin pushed out	Reinstall plug pin
	Contactors terminal screws loose	Tighten screws
	Mainline switch shut off	Turn switch on
Hoist does not lift load	Overload condition	Reduce load
	Slip clutch worn or incorrectly adjusted	Replace wear items or readjust slip clutch torque
	Motor thermal protection activated	Allow motor too cool down
	Brake not releasing	Check brake coil resistance. Check air gap setting. Adjust if necessary. Check rectifier output voltage.
Load drifts more than 4 inches [100mm]	Brake lining worn Air gap on brake is too wide	Replace wear items on brake as necessary
Travel direction does not correspond to that indicated on push button	Power supply incorrectly connected	See SECTION 2
Abnormal noises while lifting or lowering	Load chain and its components are not lubricated	Clean/Lubricate load chain.
	Load chain is worn	Replace chain
	Chain wheel or chain guide is worn	Replace chain wheel or chain guide
	Idler sprocket is worn	Replace idler sprocket
	A supply phase is missing	Connect the three phases
	Twist or kink in load chain	Remove twist or kink