



7 PREVENTATIVE MAINTENANCE

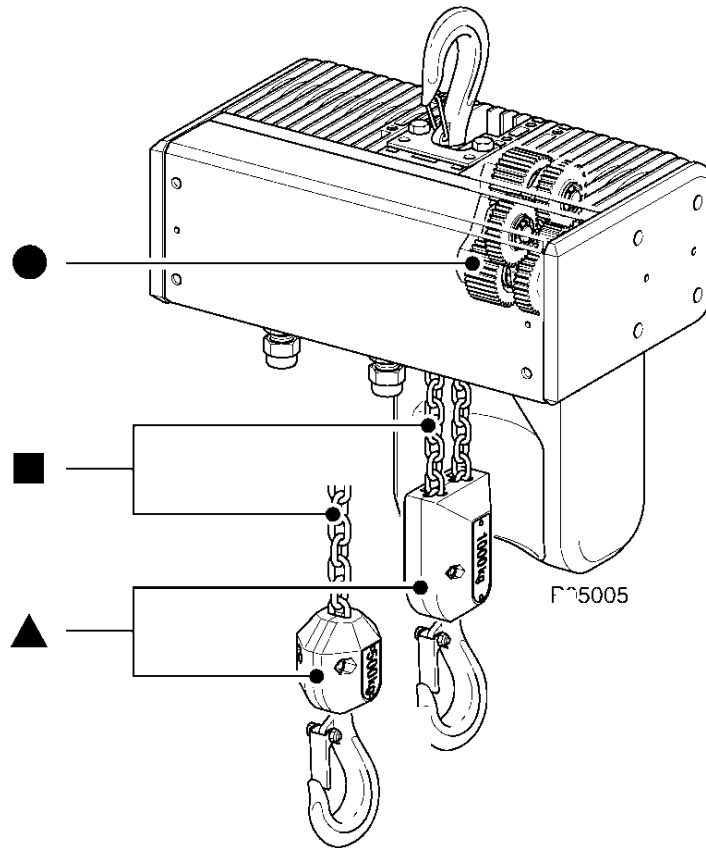
7.1 Maintenance and Inspection Table

INSPECTION CHECK	INTERVAL	QUALIFIED PERSON
BRAKE OPERATION FOR HOLDING AND RELEASING	DAILY	OPERATOR
LOAD CHAIN FOR DAMAGE	DAILY	OPERATOR
POWER AND/OR CONTROL CABLE SUPPORTS	DAILY	OPERATOR
CLEANLINESS & LUBRICATON OF LOAD CHAIN	MONTHLY	OPERATOR
UPPER / LOWER LIMIT SWITCHS	MONTHLY	OPERATOR
CHECK LOAD CHAIN FOR WEAR – MEASURE AND RECORD	QUARTERLY	INSPECTOR
CHECK HOOKS FOR WEAR MEASURE AND RECORD	QUARTERLY	INSPECTOR
CHECK CHAIN HOOK BLOCK HARDWARE TO VERIFY TIGHTNESS	QUARTERLY	OPERATOR
CHECK TOP(BODY) HOOK / COUPLING HARDWARE FOR TIGHTNESS	QUARTERLY	OPERATOR
CHECK SLIP CLUTCH & HOIST BRAKE ADJUSTMENT	QUARTERLY	MAINTENANCE
CHECK LUBRICATION OF OPEN WHEEL GEARING	QUARTERLY	MAINTENANCE
CHECK WIRE TERMINALS TIGHTNESS	SEMI-ANNUALLY	MAINTENANCE
LUBRICATE 2-FALL CHAIN HOOK BLOCK SPROCKET	ANNUALLY	OPERATOR
CHECK ALL HARDWARE FOR TIGHTNESS AND CORROSION	ANNUALLY	MAINTENANCE
CLEAN MOTOR COOLING FINS	ANNUALLY	MAINTENANCE
LUBRICATE ALL GEARING	ANNUALLY	MAINTENANCE
INSPECT CHAIN HOOK BLOCK THRUST BEARING	ANNUALLY	MAINTENANCE



INSPECTION AND MAINTENANCE INTERVALS SHOULD BE ADJUSTED BASED UPON OWNER / USER KNOWLEDGE OF APPLICATION, ENVIRONMENT, AND FREQUENCY OF USE TO PREVENT DAMAGE TO PEOPLE, EQUIPMENT, AND FACILITIES.

7.2 Lubrication



OPEN WHEEL GEARING: MOBILUX EP1 OR EQUIVALENT

LUBRICATION POINT / QTY	SPECIFICATIONS	POSSIBLE BRANDS
■ AS REQUIRED	Oil or liquid grease	Chain lubricant (Ceplattyn or similar) EP-90
▲ AS REQUIRED	GREASE (without MoS2) KP 2 (DIN 51 502) Soap-based lithium Temperature -4°F to 266°F	BP Energrease LS - EP 2 ESSO Unirex N2 Mobil grease HP Shell Alvanio EP Grease 2
● 0.05 LITER	KP 0 K grease (DIN 51502) Soap-based lithium + MoS2 Temperature -30°C to 130°C	Mobil grease special BP Multi-purpose grease L 21 M Shell Retimax AM Texaco Molytex grease EP 2



7.3 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 shaft assembly	Qualified Mechanic
Motor end cap	Qualified Mechanic
Gearing (1st/2nd stage)	Qualified Electrician & Mechanic
Brake & 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 assembly	Qualified Mechanic
Control box	Qualified Electrician

Once a part has been replaced, perform an operational check of hoist per Sections 3.3 and 3.4.

7.4 Torque (lb-ft) Specifications

	M5	M6	M8	M10	M12
STANDARD SCREWS	4	7	18	35	61
SELF-TAPING SCREWS	4	6	15	30	53



7.5 Troubleshooting

PROBLEM	POSSIBLE CAUSE	POSSIBLE SOLUTION
Hoist does not lift or lower load	Emergency stop button is activated	Release button
	Motor thermal protection activated	Allow motor too cool down
	Blown fuse	Replace the fuse
	Contactors terminal screws loose	Tighten screws
Hoist does not lift load	Mainline switch shut off	Turn switch on
	Overload condition	Reduce load
	Slip clutch worn or incorrectly adjusted	Replace wear items or readjust slip clutch torque
Load drifts more than 4 inches [100mm]	Brake not releasing	Check brake coil resistance. Check air gap setting. Adjust if necessary. Check rectifier output voltage.
	Brake lining worn Air gap on brake is too wide	Replace wear items as necessary Adjust air gap setting
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 and 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