









MASKINREGISTERET



FLZ 490

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70 kg

9405661-000

SOLØR RENOVASJON IKS

Customer: Machine type: **LH 22 M** Serial no. **117920** Operating hours: **3023** Date: **13.3.24**

Maintenance / inspection after service hours							Tasks to be performed				
On handover	All 8-10 h	All 50 h	All 500 h	All 1000 h	All 2000 h	Other intervals	Additional labelling	By maintenance staff	By authorised specialist staff	Confirm tasks	See page
								■ Once-only activity ● Repeat interval † If necessary * Annually before the winter ‡ Assistance required ‡ Have this task carried out exclusively by a certified electrician	□ Once-only activity ○ Repeat interval † If necessary		
Complete machine											
	●	●	○	○	○			Check machine for proper condition and tightness.		✓	030-39
		●	○	○	○			Lubricate bearings on machine and working attachment.		✓	030-43
		●	○	○	○			Check components for cracks.		✓	030-45
			□			◇		Adjust machine as per adjustment checklist.		✓	030-46
			○	○	○	+		Lubricating hinges, locks and gas pressure springs of doors, hoods and windows.		✓	030-46
				○	○			Analysis of engine oil: Generally recommended (at least every 2 years); mandatory if a service agreement, additional warranty or powerline warranty exists.		✓	030-46
			○	○	○			Analysis of biodegradable hydraulic oil: Generally recommended (at least every 2 years); mandatory if a service agreement, additional warranty or powerline warranty exists.		✓	030-46
				○	○			Analysis of mineral oil hydraulic oil: Generally recommended (at least every 2 years); mandatory if a service agreement, additional warranty or powerline warranty exists.		✓	030-46
				○	○			Analysis of wheel hub gear oil: Generally recommended (at least every 2 years) for travelling proportion above 30 % of overall operating hours; mandatory if a service agreement, additional warranty or powerline warranty exists.		✓	030-46
						◇		Optional fuel and operating fluid analyses: Exclusively recommended.		✓	030-46
Drive group											
	●	●	○	○	○			Diesel engine: Check oil level.		✓	030-75
	●	●	○	○	○			Diesel engine: Checking breather line of crankcase		✓	030-76
			○	○	○			Diesel engine: Stage V or 4f: Change oil. (at least once a year or depending on the engine oil quality and complication factor) (For more information see: 030.3.4 Engine oils, page 030-22)		✓	030-77
						◇		Diesel engine ECE-R.96H (III-A equivalent): Change oil. (at least once a year) (For more information see: 030.3.4 Engine oils, page 030-22) Diesel engines without emission type approval: Change oil. (at least once a year or depending on the engine oil quality and complication factor)		✓	030-77
						◇		Diesel engine: Replace oil filter. (at least during every engine oil change)		✓	030-82

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Customer:.....Machine type:.....Serial no.:.....Operating hours:.....Date:.....

Maintenance / inspection after service hours							Tasks to be performed				
On handover	All 8-10 h	All 50 h	All 500 h	All 1000 h	All 2000 h	Other intervals	Additional labelling	By maintenance staff	By authorised specialist staff	Confirm tasks	See page
								■ Once-only activity ● Repeat interval + If necessary * Annually before the winter ‡ Assistance required † Have this task carried out exclusively by a certified electrician	□ Once-only activity ○ Repeat interval ◇ If necessary		
				○	○			Diesel engine: Replace oil separator filter cartridge. (at least once a year)		✓	030-83
			○	○	○			Diesel engine: Check belt drive.		✓	030-85
				○	○			Diesel engine: Replace belt.		✓	030-85
						○		Diesel engine: Check and adjust valve clearance.			030-87
	●	●	○	○	○	+		Fuel pre-filter: Drain water.		✓	030-99
		●	○	○	○			Fuel tank: Drain water and sediments.		✓	030-99
			○	○	○	◇		Fuel pre-filter: Replace filter cartridge.		✓	030-101
			○	○	○	◇		Fuel fine filter: Replace filter element.		✓	030-103
						◇		Bleed fuel system.			030-105
			○	○	○	◇		Air filter: Check contamination level.		✓	030-109
		●	○	○	○	+		Air filter: Empty dust collecting tank.		✓	030-110
			○	○	○	+		Air filter: Replace main filter cartridge (when service indication appears / once a year).		✓	030-110
					○	+		Air filter: Replace safety filter cartridge (during every third replacement of main filter cartridge, at least every 2 years).			030-112
						+		Diesel particulate filter: Activate and deactivate regeneration.			030-113
					○3000 h	◇		Diesel particulate filter (option): Replace filter module and send used filter module to authorised Liebherr service partner for cleaning.			030-119
					○3500 h			Diesel exhaust fluid tank: Replace filter element. (at least every 2 years)			030-126
		●	○	○	○	+		Diesel exhaust fluid tank: Clean sieve.		✓	030-127
			○	○	○			Generator drive (option): Check belt drive.			030-128
					○			Generator drive (option): Replace belt and tensioning element.			030-134
Cooling system											
	●	●	○	○	○	+		Check coolant level.		✓	030-139
	●	●	○	○	○	+		Check cooling system and heat exchanger for contamination.		✓	030-140
						*		Coolant: Check the concentration (at least once a year).			030-141
					○6000 h			Cooling system: Change Liebherr-Antifreeze OS coolant (at least every 4 years).			030-146
	●	○	○	○		+		Cooling system: Clean and check dirt guard.		✓	030-147

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Customer:..... Machine type:..... Serial no.:..... Operating hours:..... Date:.....

Maintenance / inspection after service hours							Tasks to be performed				
On handover	All 8-10 h	All 50 h	All 500 h	All 1000 h	All 2000 h	Other intervals	Additional labelling	By maintenance staff	By authorised specialist staff	Confirm tasks	See page
								■ Once-only activity ● Repeat interval † If necessary * Annually before the winter ‡ Assistance required † Have this task carried out exclusively by a certified electrician	□ Once-only activity ○ Repeat interval ‡ If necessary		
Working hydraulics											
		●	○	○	○	+		Hydraulic tank: Check oil level.		✓	030-149
			○	○	○	+		Hydraulic tank: Drain water and sediments (after stationary time of over 6 months).		✓	030-152
						‡		Hydraulic tank: Change oil. (For more information see: Oil change, page 030-26)			030-153
					○			Hydraulic tank: Replace breather filter. (additionally at every hydraulic oil change (For more information see: Filter replacement, page 030-25))			030-156
		■	○	○	○			Return filter: Check and clean magnetic rod. (once a week for the first 300 operating hours)		✓	030-157
			□	○	○	‡		Return filter: Replace filter cartridge. (additionally at every hydraulic oil change (For more information see: Filter replacement, page 030-25))		✓	030-158
		●	○	○	○			Bypass filter (option): Check degree of contamination of filter cartridge.			030-159
						‡		Bypass filter (option): Replace filter cartridge. (For more information see: Filter replacement, page 030-25)			030-160
						‡		Bypass filter (option) integrated in return filter: Replace filter cartridge. (For more information see: Filter replacement, page 030-25)			030-161
			○	○	○			Servo control unit: Replace filter cartridge.		✓	030-162
						○3000 h		High-pressure filter: Replace filter cartridge.			030-164
			○	○	○	‡		Hydraulic hammer return filter (option): Check degree of contamination and replace filter cartridge.			030-165
						‡		Replace hydraulic hoses.			030-166
Steering system											
				○	○			Steering: Check function and tightness.		✓	030-167
				○	○			Steering: Check condition and mounting.		✓	030-171
Brake system											
			○	○	○			Service brake and parking brake: Check function and effect.		✓	030-172
			○	○	○			Brake system: Check tightness.		✓	030-173
Electrical system											
			○	○	○			Check lighting of machine.		✓	030-174

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Customer:..... Machine type:..... Serial no.:..... Operating hours:..... Date:.....

Maintenance / inspection after service hours							Tasks to be performed				
On handover	All 8-10 h	All 50 h	All 500 h	All 1000 h	All 2000 h	Other intervals	Additional labelling	By maintenance staff	By authorised specialist staff	Confirm tasks	See page
								■ Once-only activity ● Repeat interval † If necessary * Annually before the winter	□ Once-only activity ○ Repeat interval ‡ If necessary		
								Additional labelling †† Assistance required ‡ Have this task carried out exclusively by a certified electrician			
										✓	030-174
										✓	030-177
										✓	030-178
										✓	030-179
Transmission											
										✓	030-180
										✓	030-181
										✓	030-182
Axles											
										✓	030-183
										✓	030-186
										✓	030-186
										✓	030-190
										✓	030-191
										✓	030-193
										✓	030-194
Working attachment											
										✓	030-195
										✓	030-195
										✓	030-195
Operator's cab, heating and air conditioning											
										✓	030-196
										✓	030-196
										✓	030-198
										✓	030-198

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Customer:..... Machine type:..... Serial no.:..... Operating hours:..... Date:.....

Maintenance / inspection after service hours						Tasks to be performed					
On handover	All 8-10 h	All 50 h	All 500 h	All 1000 h	All 2000 h	Other intervals	Additional labelling	By maintenance staff	By authorised specialist staff	Confirm tasks	See page
						◇		By maintenance staff ■ Once-only activity ● Repeat interval + If necessary ✱ Annually before the winter Additional labelling † Assistance required ‡ Have this task carried out exclusively by a certified electrician	By authorised specialist staff □ Once-only activity ○ Repeat interval ◇ If necessary		
			○	○	○			Clean pre-filter.		✓	030-199
				○	○			Replace filter cassette (shorten interval accordingly in dust intensive application).		✓	030-200
			○	○	○			Check whether safety belt is available and functioning.		✓	030-201
Lubrication system											
		●	○	○	○	+		Lubrication system: Fill with grease.		✓	030-202
		●	○	○	○			Check lubrication of bearings (grease collar).		✓	030-203
Slewing gearbox and slewing ring											
		●	○	○	○			Slewing gearbox: Check oil level.		✓	030-204
			□	○	○			Slewing gearbox: Change oil.		✓	030-206
				○	○			Slewing gear brake: Check function.		✓	030-207
			○	○	○			Slewing ring: Check screwed connections.		✓	030-208

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Attest for periodisk sakkyndig kontroll

KONTROLLRAPPORT

iht. §8-7 i "Forskrift om adm. ordninger".

Kontroll nr.: 083579	Sak.virksomhet:
Maskinutleier:	LIEBHERR-NORGE AS
Maskinutleiers adresse:	Sak.virksomhet sertnr.: SV-120
Maskinbruker: SOLØR RENOVASJON IKS	Sak.virksomhet avd.:
Maskinbrukers adresse:	Sertifiseringsorgan: Kiwa AS
Kontrollsted: Flisa	Kontrollør: Kjell-Arne Høyvik

Referanse/rek.nr:	V.ordrenr.: 12306521	Dato: 13.03.2024	Side 1			
Fabrikat: Liebherr	Modell: LH 22 M Litronic	Serienr./VIN-nr: WLHZ1250LZK117920	Kjennemerke (SFS): FLZ490	Internnr.:	ÅrsmodeLL: 2019	Timeteller: 3023

Utskiftbart utstyr/verktøy, fremstilt for kontroll med maskinen

Type utstyr/verktøy:	Fabrikat/modell:	Serie/produktnr:	Int.nr:
sorteringsklype	Liebherr	936201	

Forklaring til punkter som har fått vurdering 1, 2, 3 eller 4

Kontrollpunktnr. og komponent:	Vurdering:	Beskrivelse av avvik:	Kontrollert av/dato:
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Maskinen er godkjent.

Maskinen er forsvarlig å bruke. Se §13-4 "Dokumentasjon av sakkyndig kontroll" i "Forskrift om utførelse av arbeid".

V. ordrenr.: 12306521	Kontrollert dato: 13.03.2024	Neste sakkyndige kontroll: Mars 2025
Sak. virksomhet: LIEBHERR-NORGE AS	Kontrollør: Kjell-Arne Høyvik	Signatur: Dokumentet er elektronisk signert.
Sak. virksomhet avd.:		
Sertifiseringsorgan: Kiwa AS		

Sjekkliste for periodisk kontroll

(for kontrollrapport på foregående side)

Vurdering av kontrollpunkter:

V: Vurdering. -: Ikke aktuelt. 0: Kontrollert og funnet i orden. 1: Feil/mangel som skal rettes, etterkontroll er ikke påkrevet. 2: Feil/mangel som skal rettes, etterkontroll er påkrevet. 3: Kjøreforbud anbefales, etterkontroll er påkrevet. U: Utbedret.

System/komponent/sjekkpunkt	V	Beskrivelse av avvik	Utbedret av/dato
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6. Ramme og understell

6.7 Rammeleddslås	-		
6.8 Tippstøtte	-		

7. Arbeidsutstyr

7.1 Laste/graveutstyr	0		
7.2 Gafler/Gaffelbord	-		
7.3 Teleskopbom	-		
7.4 Personløftplattform	-		
7.5 Løftekrok	-		

8. Styring

8.1 Farlig slitasje	0		
8.2 Retningsstabilitet	0		
8.3 Spakstyring	0		
8.4 Nødstyring	0		

9. Bremses

9.1 Lekkasjer	0		
9.2 Farlig slitasje	0		
9.3 Bremsvirkning	0		
9.4 Parkeringsbrems funksjon	0		

10. Hydraulikksystem

10.1 Lekkasjer	0		
10.2 Skade, feil på slanger/rør	0		
10.3 Senkehastighet	0		
10.4 Nødsenk	0		

11. Elektrisk anlegg

11.1 Batteri	0		
11.2 Kabler	0		
11.3 Lys	0		

12. Generelt

12.1 Renhold	0		
12.2 Vedlikehold	0		
12.3 Støy	0		
12.4 Stigtrinn, rekkverk	0		
12.5 Brannsikkerhet	0		
12.6 Modifikasjon/Ombygging	0		
12.7 Prøvekjøring	0		

13. Utskiftbart utstyr og verktøy