



Additional User's manual

BERINGER Integrated bin lifter



Table of contents

1.	Safety instructions	3
	Stickers	4
2.	Descriptions	5
2.1	Intended use	5
2.2	Description of main parts.....	5
3.	Initial operation	6
3.1	Put bin lifter in operation position	6
3.2	Emptying of waste bins 660/770/1100 liters	7
3.3	Emptying of waste bins 120/240/360 liters	8
3.4	Put bin lifter in transport position	9
4.	Disturbances / diagnostic fault-finding	10
5.	Maintenance	10
5.1	Periodical maintenance	11
6.	Appendix	12
6.1	Lubrication plan.....	12
6.2	Hydraulic pan with parts list.....	13
6.3	Partitional drawings with spare parts list.....	14

1. **Safety instructions**

- 1.1 Obey to safety instructions as well as service and maintenance guidelines, described in compactor's user's manual.
- 1.2 The integrated bin lifter should only be operated by trained staff.
- 1.3 No persons are allowed to be in the operation area of integrated bin lifter.
- 1.4 The waste bin has to be inserted completely into the lifting arms. Otherwise you risk, that the waste bin falls off during lifting or tipping.
- 1.5 If you are emptying waste bins 660 – 1100 Liters capacity, check before operation if the automatic lock on lifting arms is flexible. Please watch during lifting, if automatic lock is locking.
If you are emptying waste bins 120 – 360 Liters capacity, check before operation, if comb bar is fixed.
- 1.6 Reducer's lid has to be fully open during lifting and tipping.
- 1.7 Reducer's power unit has to be switched off during closing and opening of lid above feed opening.
- 1.8 Waste bins have to comply with relevant norms and should not exceed max. payload.
- 1.9 Furthermore the waste bins should not be damaged when you use them with the integrated bin lifter Especially the comb bar or trunnions have to be in good condition
- 1.10 Make sure that no human being is in the waste bin before you put it into the integrated bin lifter.
- 1.11 It is strictly forbidden, that persons are lifted with the integrated bin lifter.
- 1.12 Staff operating the integrated bin lifter has to wear appropriate safety garment (helmet, gloves, etc.)
- 1.13 The integrated bin lifter is not appropriate for operation in explosive areas (e. g. chemical plants).
- 1.14 The lid opener of the integrated bin lifter opens lids of 1,1 cbm waste bins with dome lid.
- 1.15 The BERINGER integrated bin lifter which is equipped (optional) with a lid opener, only bins (1,1 cbm) according to DIN EN 840-1 and DIN EN 840-3 can be emptied. Bins according to DIN EN 840-2 can be emptied with BERINGER integrated bin lifter, if flat lid is opened before emptying.
Waste bins according to DIN EN 840-3 can only be emptied with a lid opener.
- 1.16 Overlaying material has to be removed before emptying.
- 1.17 Never operate a damaged integrated bin lifter.
- 1.18 Provide enough light in dark areas.

1.19 Never grasp into the tipping device.

Stickers

<p>Attention!</p> <p>Only empty trolley bin if lid above feed opening is open! Bin lifter is only suitable for bins according to DIN / EN 840!</p> <p>BERINGER Middle East FZC, P. O. Box 5470, Fujairah, U.A.E.</p>	 <p>Up Down</p> <p>Joystick for lifting and tipping device</p>
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User's manual

1. Switch on compactors power unit and move lifting and tipping device to lowest stop position by using the joy stick.
2. Switch off power unit and open lid above feed opening completely.
Never empty a bin with integrated bin lifter if lid above feed opening is closed.
3. Put your 1,1cbm trolley bin into the lifting device.
Please check if it is fixed properly.
4. Switch on power unit and empty the trolley bin.
5. Take the trolley bin back to the ground by using the joy stick and take it out.

During operation, nobody is allowed to be in the sphere of the bin lifter!

Only trained staff is allowed to operate the bin lifter

Trolley bins 1,1cbm without lid can only be emptied with a bin lifter without lid opener. Overlaying materialsn has to be removed before emptying.

Never operate a damaged bin lifter!

Provide lighting in dark areas.

BERINGER Middle East FZC, P. O. Box 5470, Fujairah, U.A.E.



2. Description

2.1 Intended use

The BERINGER integrated bin lifter is appropriate for filling of BERINGER reducers with waste bins according to EN 840-1, EN 840-2 und EN 840-3; volume from 120 to 1100 Liters.

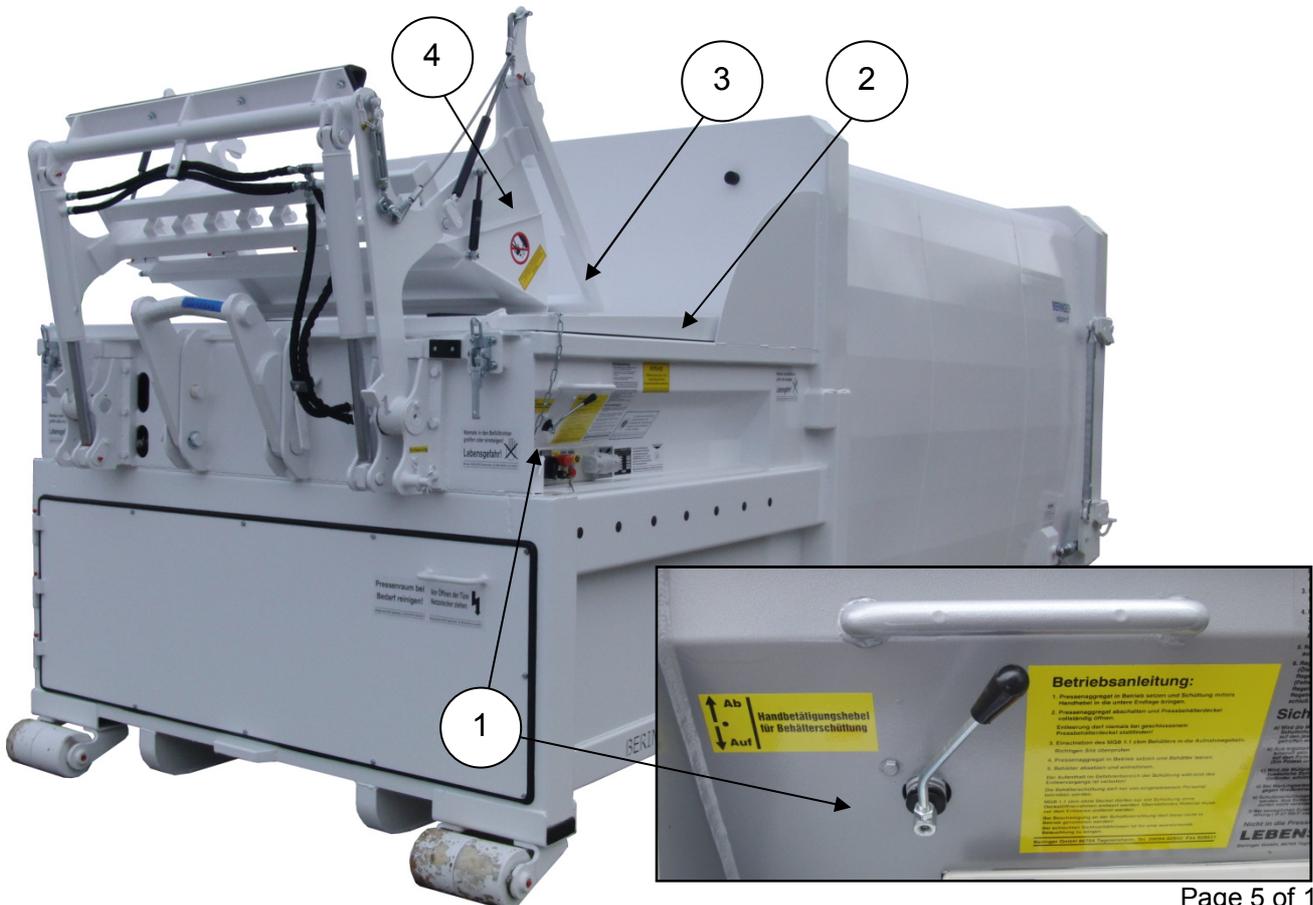


BE AWARE Obey to safety instruction 1.15

BERINGER integrated bin lifter can empty bins with comb bar as well as bins with trunnions.

2.2 Description of main parts

- 1 Control valve for integrated bin lifter
- 2 Lid above feed opening
- 3 Lid opener (optional)
- 4 Sheet for integrated bin lifter



Page 5 of 17

3. Initial operation

Operating staff must be familiar with the user's manual of reducer and integrated bin lifter.

The user of reducer and integrated bin lifter is responsible for safety briefing and training of staff.

If the reducer is filled with an integrated bin lifter and the lid above reducer's feed opening is closed, lid and integrated bin lifter might be damaged.

3.1 Put integrated bin lifter in operation position

Operation of integrated bin lifter can be controlled with a hand level valve, which is installed above control panel.

- Switch on reducer
- Put BERINGER integrated bin lifter in the lower end position, by pushing the hand level valve up.
- Fix rope and spanner nut



3.2 Emptying of waste bins 660/770/1100 liters

The waste bins according to DIN EN 840-2 and DIN EN 840-3 can be lifted with the arms of integrated bin lifter.



Be Aware obey to safety instruction 1.15

1. Put BERINGER integrated bin lifter in operation position according to 3.1.
2. Open lid above compactor's feed opening, while compactor is switched off. Switch on compactor when lid is open.
3. Put waste bin between the lifting arms. Make sure, that trunnions fit into the automatic lock. (adjust if necessary with hand level valve).
4. Lift waste bin slightly with hand level valve and check if trunnions are locked. The trunnions will be locked until bin is empty and back on ground.
5. By pulling the hand level valve, the waste bin can be emptied again.
6. When waste bin is in the upper end position, the waste falls into the reducer.
7. Push the hand level valve in order to put the waste bin in the lower end position.



3.3 Emptying of waste bins 120/240/360 liters

Trolley bins according to DIN EN 840-1 can be lifted by comb bar.



Be aware
obey to safety instruction 1.15

1. Put BERINGER integrated bin lifter in operation position according to 3.1
2. Open lid above compactor's feed opening, while compactor is switched off. Switch on compactor when lid is open.
3. Put waste bin into comb bar lock. Make sure, that comb bar fits into the lock.
4. Lift waste bin slightly with hand level valve and check if comb bar is locked. The comb bar will be locked until bin is empty and back on ground.
5. By pulling the hand level valve, the waste bin can be emptied again.
6. When waste bin is in the upper end position, the waste falls into the reducer.
7. Push the hand level valve in order to put the waste bin in the lower end position.



3.4 Put integrated bin lifter in transport position

Check before transport that no waste bin is in the integrated bin lifter. Close lid of compactor's feed opening when integrated bin lifter is in the lower end position and compactor is switched off. Switch on compactor and put integrated bin lifter in the upper end position. Fix rope and spanner nut. Now the compactor with integrated bin lifter is in transport position (see picture) and can be picked up.

Note that compactor and integrated bin lifter can be damaged if it is not in transport position.

Driver is responsible for load safety!



4. Disturbances

Please read instructions for diagnostic-fault finding on reducer first.

Disturbance	Reason	Solution
BERINGER integrated bin lifter doesn't move any more	Reducer is switched off	Switch on Reducer
	overload	The max. payload of integrated bin lifter has been exceeded; make bin lighter
Lid opener doesn't open lid any more	Counter rope and shackle are not fixed properly	Fix counter rope and shackle

In case those instructions don't help to solve the problem, please call BERINGER service staff.

5. Maintenance

Generally we advise you to conclude a service contract with the manufacturer. Periodical inspections by an expert ensure safety and a long life-time cycle of the compactor.

Please ask for a quotation concerning the service contract



Be Aware

Disconnect from power supply during maintenance work.

Maintenance consists of the following works:

- Inspection of locks for waste bins.
- Continuous inspection of hydraulic pipes and connections for leaks.
- Periodical lubrication of swivels and hinges with multi-purpose grease.
- Inspection of hydraulic system
- General checks

5.1 Periodical maintenance

weekly

- Check all hydraulic parts for leaks (especially hydraulic connections)
- Check all hydraulic pipes for damages

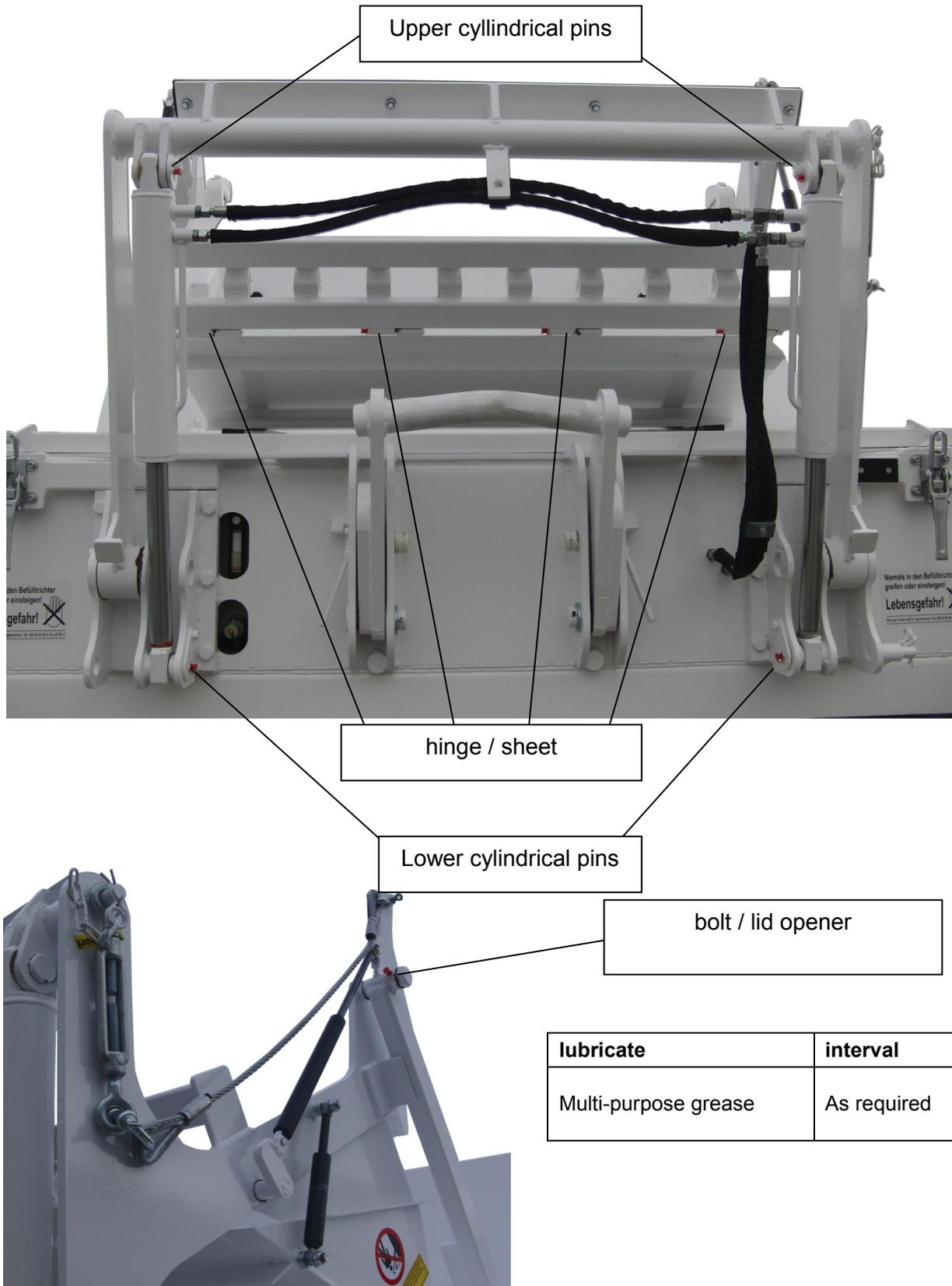
quarterly

- Lubricate BERINGER integrated bin lifter according to lubrication plan (see chapter 6.1)

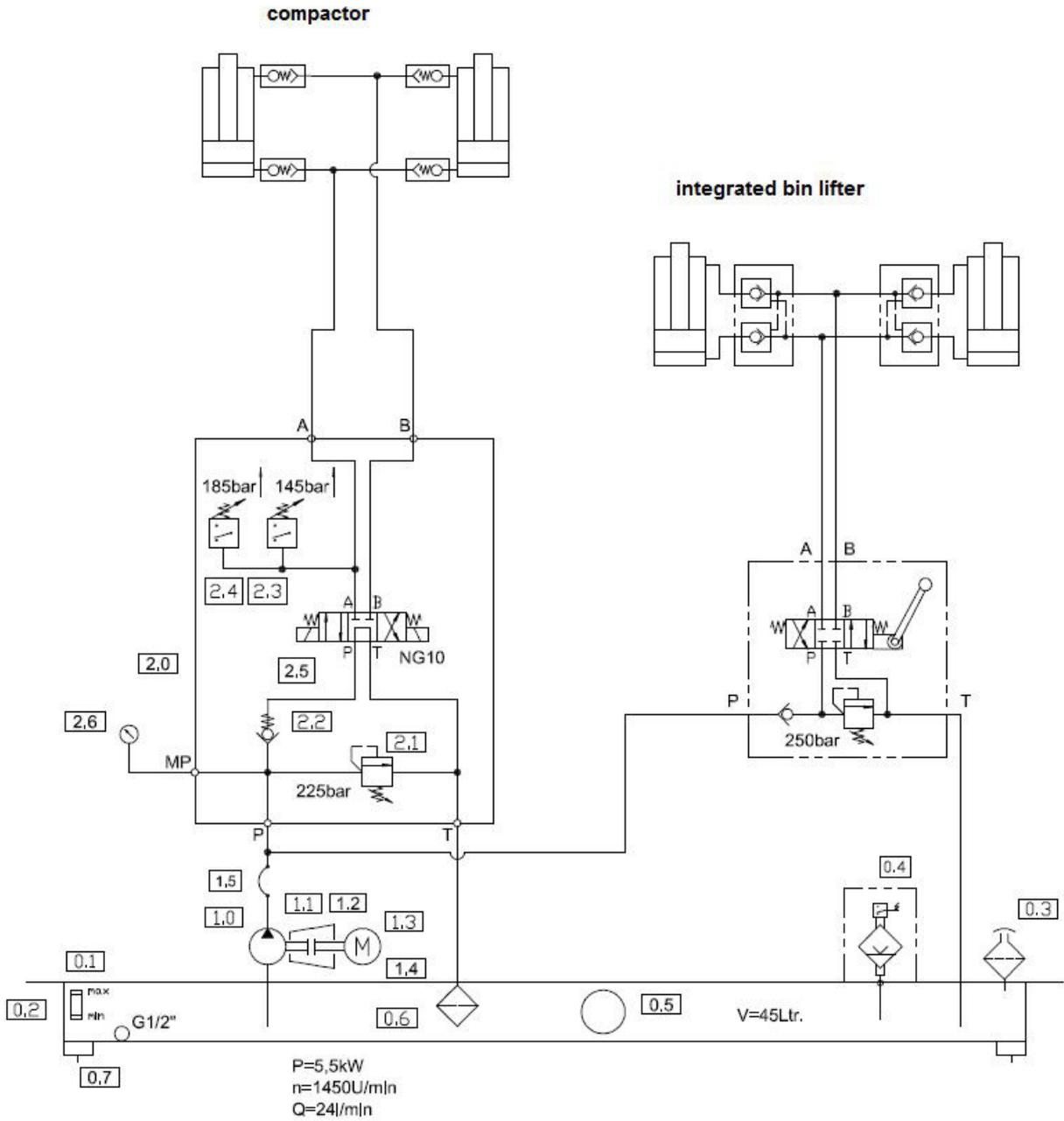
Only use original spare parts in order to guarantee proper functioning.

6. Appendix

6.1 Lubrication plan for integrated bin lifter (completes lubrication plan of)



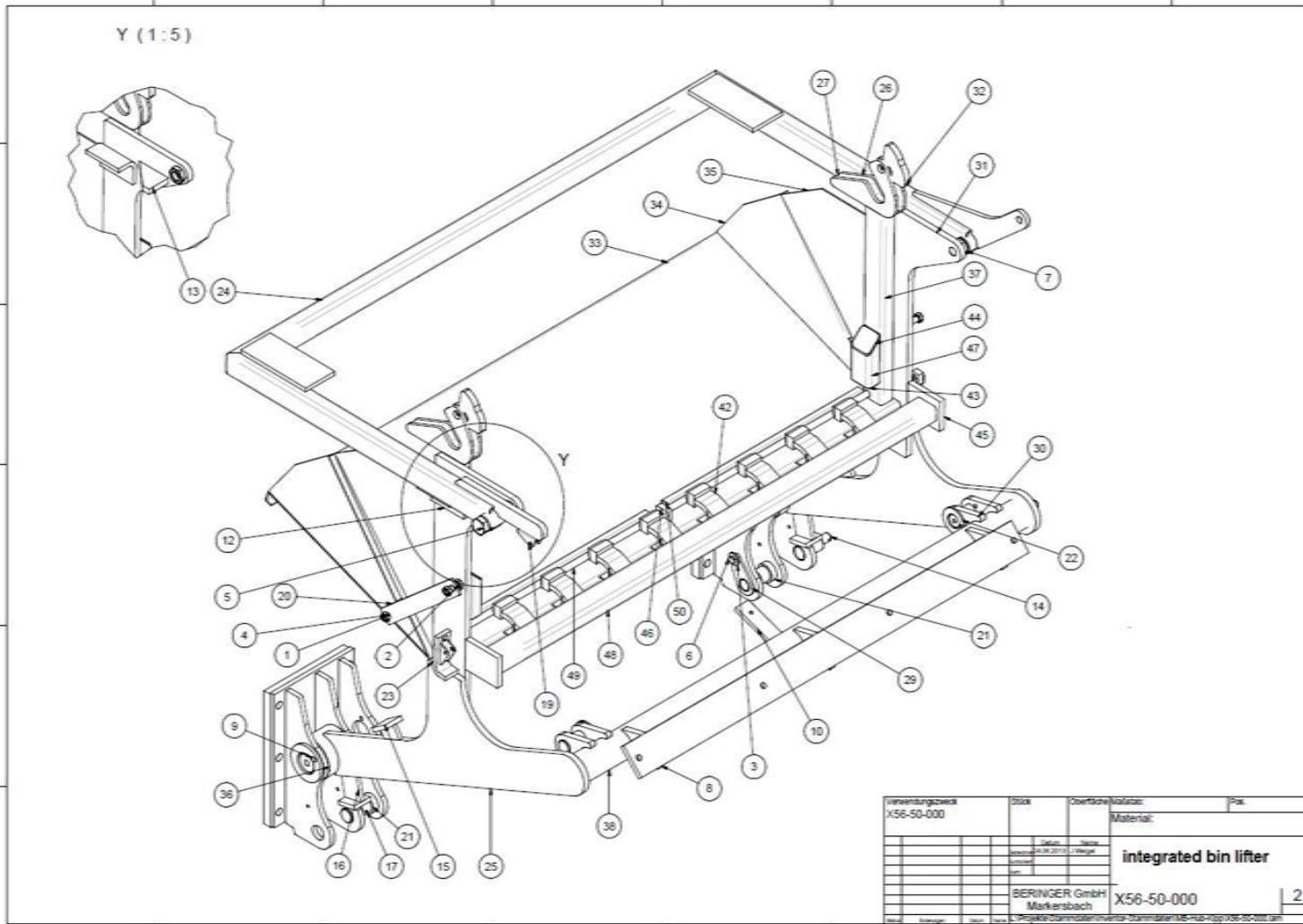
6.2 Hydraulic plan with parts list
(replaces compactor's hydraulic plan)



6.3 Hydraulic plan with parts list
(replaces compactor's hydraulic plan)

Pos.	Pieces	Article	Artikel	Order Number
0.1	1	Oil tank 500x350x330	Sonderölbehälter 500x350x330	EPHY01
0.2	1	Oil level indicator ÖS 127	Ölstandsanzeige ÖS 127	EPHY02
0.3	1	Breather filter	Einfüll- und BelüftungsfILTER	EPHY03
0.4	1	Oil deficiency switch	Niveauschalter (Ölmangelschalter)	EPHY04
0.5	1	Cleaning lid complete	Reinigungsdeckel komplett	EPHY05
0.6	1	Oil filter	Filter (ÖlfILTER)	EPHY06
0.7	4	Silent block x4ergo/x5/x6 + pend. compactor 50/20 (M10-thread on both sides)	Silentblock x4ergo/x5/x6 + SK-Pressen 50/20 (M10-Gewinde beidseitig)	EP87
or	4	Silent block x4 50/40 (M10-thread on both sides)	Silentblock x4 50/40 (M10-Gewinde beidseitig)	EP87-1
1.0	1	Hydraulic pump (HyP)	Pumpe f. Hydraulik (HyP)	EPHY08
1.1	1	Pump flange (oil proof)	Pumpenträger, öldicht	EPHY09
1.2	1	Coupling steel complete for pump (motor hub, pump hub, gear rim)	Kupplung Stahl komplett f. Pumpe (Motornabe, Pumpennabe, Zahnkranz)	EPHY10
1.3	1	E-Motor 5,5 KW (400/590 V)	E-Motor 5,5 KW (400/590 V)	EPHY11
1.4	1	Cork seal / pump support	Korkdichtung / Pumpenträger	EPHY12
1.5	1	Hose pipe	Schlauchleitung	EPHY13
2.0	1	Control block without valves	Steuerblock ohne Ventile	EPHY14
2.1	1	Pressure valve for silent block RPCC-FWN (10-315 bar)	Druckbegrenzungsventil f. Steuerblock RPCC-FWN (10-315 bar)	EPHY15
2.2	1	Blow-off valve for silent block CXBG-XCN	Rückschlagventil für Steuerblock CXBG-XCN	EPHY16
2.3	1	Pressure switch for 80% fill level signal (145 bar)	Druckschalter f. 80% Meldung (145 bar)	EPHY17-145
2.4	1	Pressure switch (185 bar)	Druckschalter (185 bar)	EPHY17
2.5	1	Pressure valve NG10	Wegeventil NG10	EPHY18
2.6	1	Manometer 0-250 bar	Manometer 0-250 bar	EPHY19
3.0+3.1	2	Hydraulic jack (x4) DWZ 100/70 x 750 Hub EBL 1110 mm	Hydraulikzylinder (x4) DWZ 100/70 x 750 Hub EBL 1110 mm	EP28
or	2	Hydraulic jack (x5) DWZ 100/70 x 785 Hub EBL 1620 mm	Hydraulikzylinder (x5) DWZ 100/70 x 785 Hub EBL 1620 mm	EP29
or	2	Hydraulic jack (x6) DWZ 100/70 x 1230 Hub EBL 1620 mm	Hydraulikzylinder (x6) DWZ 100/70 x 1230 Hub EBL 1620 mm	EP30
4.0+4.1	2	Hydraulic jack (bin lifter) 63/40-335-EBL-585	Hydraulikzylinder (HKV) 63/40-335-EBL-585	EP98
4.2+.43	2	Burst pipe protection for hydraulic jack	Rohrbruchsicherung für Hydraulikzylinder	EP209
5.0	1	Hand level valve bin lifter HKV (integrated) With hand level	Handhebelventil HKV (fest angebaut) inkl. Handhebel	EP92

6.3 Partitional drawing and spare parts li



Spare parts list for compactor with integrated bin lifter

POS	Pcs.	Article	Artikel	Order Number
1	4	Hex nut M 12	Stopfmutter M 12	EPD019
2	4	Hex screw M 12 x 35	Sechskantschraube M 12 x 35	HKVA001
3	2	U-washer ø 10,5 mm	U-Scheibe ø 10,5 mm	EPD012
4	1	U-washer ø 13 mm	U-Scheibe ø 13 mm	EPD031
5	2	hex screw M 24 x 1,5 x 100 half thread	Sechskantschraube M 24 x 1,5 x 100, halbes Gewinde	HKVA002
6	2	hex screw M 10 x 20	Sechskantschraube M 10 x 20	HKVA003
7	2	hex nut M 24 x 1,5 flat	Sechskantmutter M 24 x 1,5 flach	HKVA004
8	1	stop bar 1200 x 80 x 12 mm	Behälteranschlagleiste 1200 x 80 x 12 mm	HKVA005
9	2	bolt for mobile bin lifter approx. 50 mm / 125 mm long	Bolzen f. HKV-Anbau ca. ø 50 mm / 125 mm lg.	EP170
10	1	flat bar / stauff clamp base	Flacheisen/Stauffschellensockel 110 x 40 x 10 mm	HKVA006
11	1	spanner nut bolt ø 20 mm (bin lifter arms)	Spannschloßbolzen ø 20 mm (HKV-Arm)	HKVA007
12	2	bent angle 65 / 55 / 40 L	Kantwinkel 65 / 55 / 40 L	HKVA008
13	1	arrester for lid opener bottom, sheet 14 mm	Deckelöffneranschlag unten, Blech 14 mm	HKVA009
14	1	spanner nut (bracket)	Spannschloßbolzen (Konsole)	HKVA010
15	2	tipping arrester (small)	Kippanschlag komplett (klein)	HKVA011
16	2	tipping arrester (large)	Kippanschlag komplett (groß)	HKVA012
17	2	cylindrical bolt for cylinder bin lifter (top) ø 35 mm approx.. 95 mm long	Zylinderbolzen f. HKV-Zylinder oben ø 35 mm / ca. 95 mm lg.	EP139
18	1	spring saddle	Lagerschuh (Federschuh)	EP125
19	1	spring saddle	Lagerschuh (Federschuh)	EP125
20	1	gas spring 650 N	Gasfeder 650 N	GF9
21	4	socket	Buchse	HKVA013
22	2	cylindrical pin for cylinder bin lifter (top) ø 35 mm / approx. 95 mm long	Zylinderbolzen f. HKV-Zylinder unten ø 35 mm / ca. 70 mm lg.	EP139-U
23	1	spring saddle	Lagerschuh (Federschuh)	EP125
24	1	frame for lid opener	Deckelöffnerahmen	EP35
25	2	arm for bin lifter (left/right)	Hubkipp-Vorrichtung-Arm für HKV1 / HKV2 (links o. rechts)	HKV-ET03
26	2	fork for bin lifter (trunnions) with fall arrester and bolt	Aufnahmegabel f. HKV (Zapfenaufnahme) mit Fallsicherung und Bolzen	EP165HKV
27				

28	1	round bar terminal strip 15 mm	Hebel Rundeisen Klemmleiste 15 mm	inkl. Pos. 42 / HKV-ET01
29	2	fixture for cylindrical pin	Sicherung für Zylinderbolzen	inkl. Pos. 17 / EP139
30	4	cylinder fixture for bin lifter	Zylinderhalteblech für HKV	EP162HKV
31	2	arm for lid opener, sheet 15 mm	Arm für Deckelöffnerahmen, Blech 15 mm	HKVA014
32	2	fall arrester for bolts	Fallsicherung mit Bolzen f. HKV 1,1 cbm	EP146HKV
33	1	sheet for bin lifter (primed) with hinges	Schüttblech für HKV angebaut (grund.)	inkl. EP140HKV
34			Scharniere (lose beigelegt)	
35	2	side plate (fix)	Seitenteil starr	HKVA015
36	2	ball bearing for bin lifter arms	Kugellager f. HKV-Arme (Nadellager m. Innenring)	EP216HKV
37	2	hollow section 60 x 40 x 4	Hohlprofil 60 x 40 x 4, 510 mm lang	HKVA016
38	1	round pipe for bin lifter 1385 mm long	Rundrohr für HKV 1385 lang	EP160HKV
39	1	reinforcement plate 6 mm; width 30 mm, length 1390 mm	Verstärkung-Blech 6 mm, 30 mm breit, 1390 mm lang	HKVA017
40	1	base plate, reducer x5/6, sheet 20 mm with holes	Sockelplatte Reducer x5/6, Blech 20 mm, mit Gewindelöchern	HKVA020
41	1	bracket (screwed) for integrated bin lifter	Konsole (schraubbar) zur Befestigung festangebauten HKV	EP169
42	1	comb bar for bins 120/240/360 complete	Kammaufnahme der HKV f. Behälter 120/240/360 l - komplett	HKV-ET01
43	2	cover (backside) sheet 3 mm	Abdeckung hinten, Blech 3 mm	incl. Pos. 47
44	2	cover (front side), sheet 3 mm	Abdeckung vorne, Blech 3 mm	incl. Pos. 47
45	2	sheet 14 mm	Blech 14 mm	inkl. Pos. 42 / HKV-ET01
46	1	hinge for terminal strip	Klemmleistenscharnier	inkl. Pos. 42 / HKV-ET01
47	2	hollow section 60 x 40 x 4, 125 mm long	Hohlprofil 60 x 40 x 4, 125 mm lang	HKVA018
48	1	hollow section 60 x 40 x 4, 125 mm long	Hohlprofil	inkl. Pos. 42 / HKV-ET01
49	1	round bar	Rundeisen	inkl. Pos. 42 / HKV-ET01
50	2	rectangular pipe	Vierkanrohr	inkl. Pos. 42 / HKV-ET01
51	4	hinge for sheet (bin lifter)	Scharnier für Schüttblech (HKV)	EP76HKV
	1	buffer for arrester	Rammschutzprofil f. Behälteranschlagleiste	HKVA019
	2	gas spring 1750 N	Gasfeder 1750 N	EP71