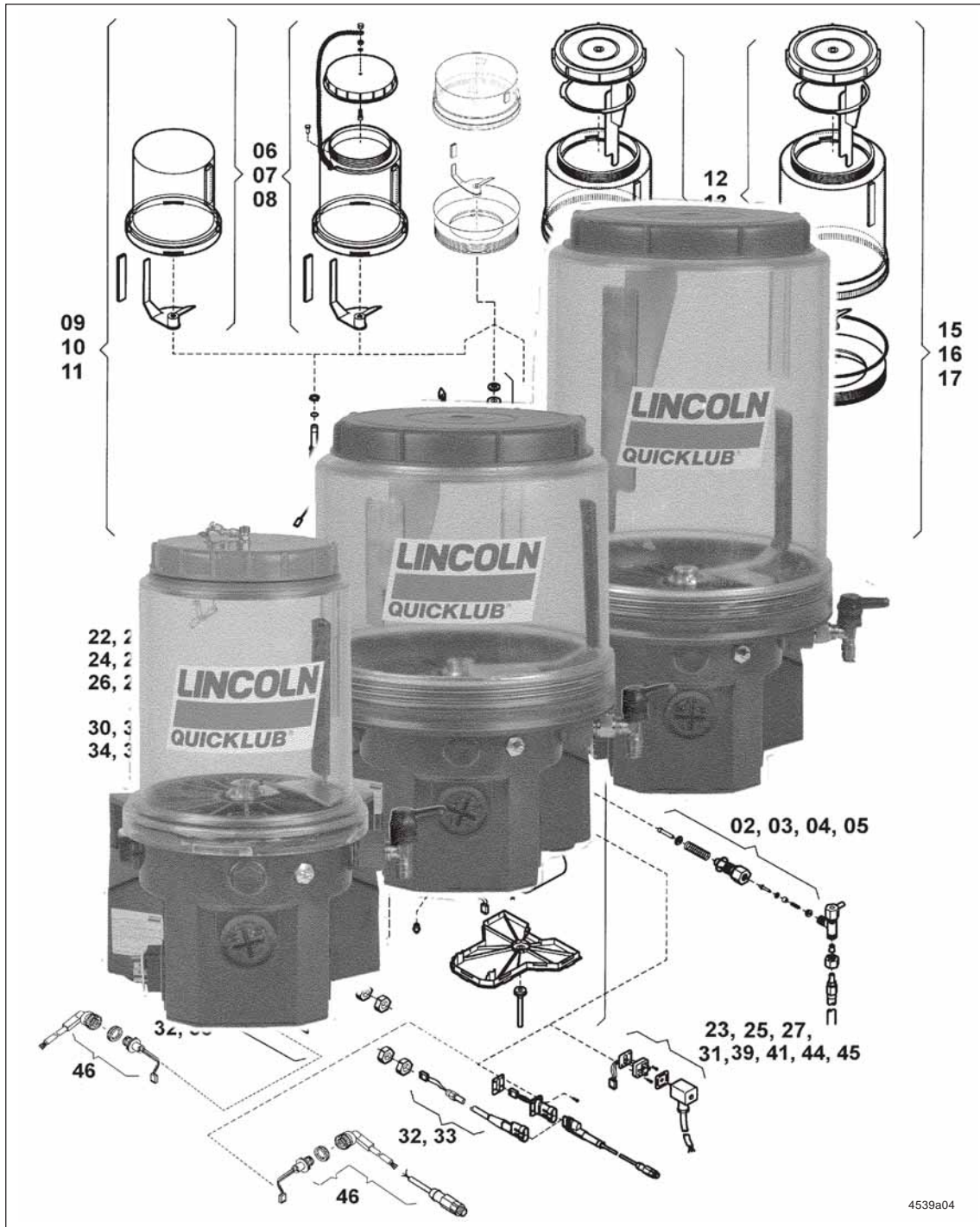


Components of Centralized Lubrication Pump P 203



Subject to modifications

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 LINCOLN GmbH
 Postfach 1263
 D-69183 Walldorf

Phone: +49 (6227) 33-0
 Fax: +49 (6227) 33-259

Subject to modifications

Further information to Quicklub pump P 203

Document no.	Description
2.1A-30001- H07	Technical Description Quicklub pump 203
2.6A-20002-E00	p.c.b. 236-13891-1 - variant V10-V13
2.6A-20005-D01	p.c.b. 236-13857-1 - variant H
2.6A-20003-D01	p.c.b. 236-13870-3 - variant M 08 - M 23
2.0L-30001-C03	Installation Instructions
2.6A-20001-G03	Parts Catalog

Identification Code – pump variants P 203 DC, with and without control p.c.b. V10-V13, V20-V23, H

Examples of model designations



6001a02

NOTE

Any pumps combinations other the noted standard pumps can be composed and ordered in accordance with the valid model identification code.

P203	- 2	X	N	- 1	K6 - 24 - 1A	1.	10
P203	- 4	X	N	BO - 1	KR - 24 - 2A	1.	01 - V12
P203	- 2	X	N	- 2	K5 - 12 - 1A	1.	10 - H
P203	- 8	X	N	BO - 1	K6 - 24 - 1A	5.	14 - V13
P203	- 4	Y	L	BO - 1	K7 - 24 - 1A	1.	10 - V20
P203	- 2	X	L	- 1	K6 - 24 - 1A	7.	16 - V10

- P203²⁾

Basic pump model for grease or oil
with 1-3 outlets and 12 VDC or 24 VDC motor

Reservoir design

- 2 = 2 l transparent plastic reservoir
- 4 = 4 l transparent plastic reservoir
- 8 = 8 l transparent plastic reservoir
- 15 = 15 l transparent plastic reservoir
- X = Reservoir for grease
- Y = Reservoir for oil

- N = Standard design

- L = Low-level control

- LNC = Low-level control, normally closed

- No indication = standard reservoir (2 liters)

- BO = Filling from the top

- FL = Flat-type reservoir (only for 2 liters without low-level control)

Pump elements

- 1-3 = Number of elements used

- K 5 = Piston diameter = 5 mm

- K 6 = Piston diameter = 6 mm

- K 7 = Piston diameter = 7 mm

- KR = Pump element, adjustable, Piston diameter = 7 mm

- C 7 = Piston diameter = 7 mm³⁾

- B 7 = Piston diameter = 7 mm (output of K5)^{D)}

- S 7 = Piston diameter = 7 mm (for greases containing silicone)

Supply voltage

- 12 = 12 VDC (direct current motor)

- 24 = 24 VDC (direct current motor)

Number of electric connecting possibilities

- 1A = 1 connection, left power supply¹⁾

- 1A = 1 connection, left power supply²⁾

- 1A = 1 connection, left power supply³⁾, illuminated pushbutton for additional operating cycles and low-level control^{C)}

- 2A = 2 connections, left power supply¹⁾ + right illuminated pushbutton for additional operating cycles and low-level control^{1) & C)}

Type of connection

- 1 = Square-type plug acc. to DIN 43650, industrial application

- 2 = M12 plug

- 3 = Bayonet plug, 4/2-pole, without plug, without cable

- 5 = Bayonet plug acc. to DIN 72585-1, 4/3-pole (V10-13, 7/3-pole with V20-23, H), only for mobile applicaiton

- 7 = Bayonet plug acc. to DIN 72585-1, 7/6-pole (V10-13, V20-23), only for mobile applicaiton

Connection outside of the pump

- 00 = without socket, without cable

- 01 = with socket, without cable¹⁾

- 10 = with socket, with 10 m cable¹⁾

- 11 = with socket, with 10 m cable ADR^{1) & A)}

- 14 = Bayonet socket with 10 m cable²⁾, 4/3-core, (V10-13, 7/3-core with V20-23) without low-level control, without illuminated pushbutton^{C)}

- 16 = Bayonet socket with 10 m cable³⁾, 7/6-core (V10-13, V20-23), with low-level control or with illuminated pushbutton^{C)}

- 17 = Bayonet socket with 10 m cable ADR^{2) & A)}, 4/3-core (V10-13, H)

- 70 = Bayonet socket with 6 m cable, 7/3-core for USA

Control p.c.b. 12V / 24 V

- V10-V13 = with adjustable pause and lubricating time^{1) 2) & 3)}

- H = for trailer or semitrailer^{1) & 2)}

- No indication = without control p.c.b.^{1) & 2)}

¹⁾ In conjunction with square-type plugs (type of connection 1)

²⁾ In conjunction with bayonet plugs (type of connection 5)

³⁾ In conjunction with bayonet plugs (type of connection 7)

^{A)} For transport of hazard materials

^{B)} C7 = Indication for pump elements to deliver chisel paste

^{C)} Low-level control for oil; connection between low-level control and control p.c.b. is not possible and therefore, is not taken into consideration

^{D)} For use at ambient conditions with a high degree of pollution or high dust concentration

Identification Code – pump variants P 203 DC, with control p.c.b. M08-M23

Examples of model designations

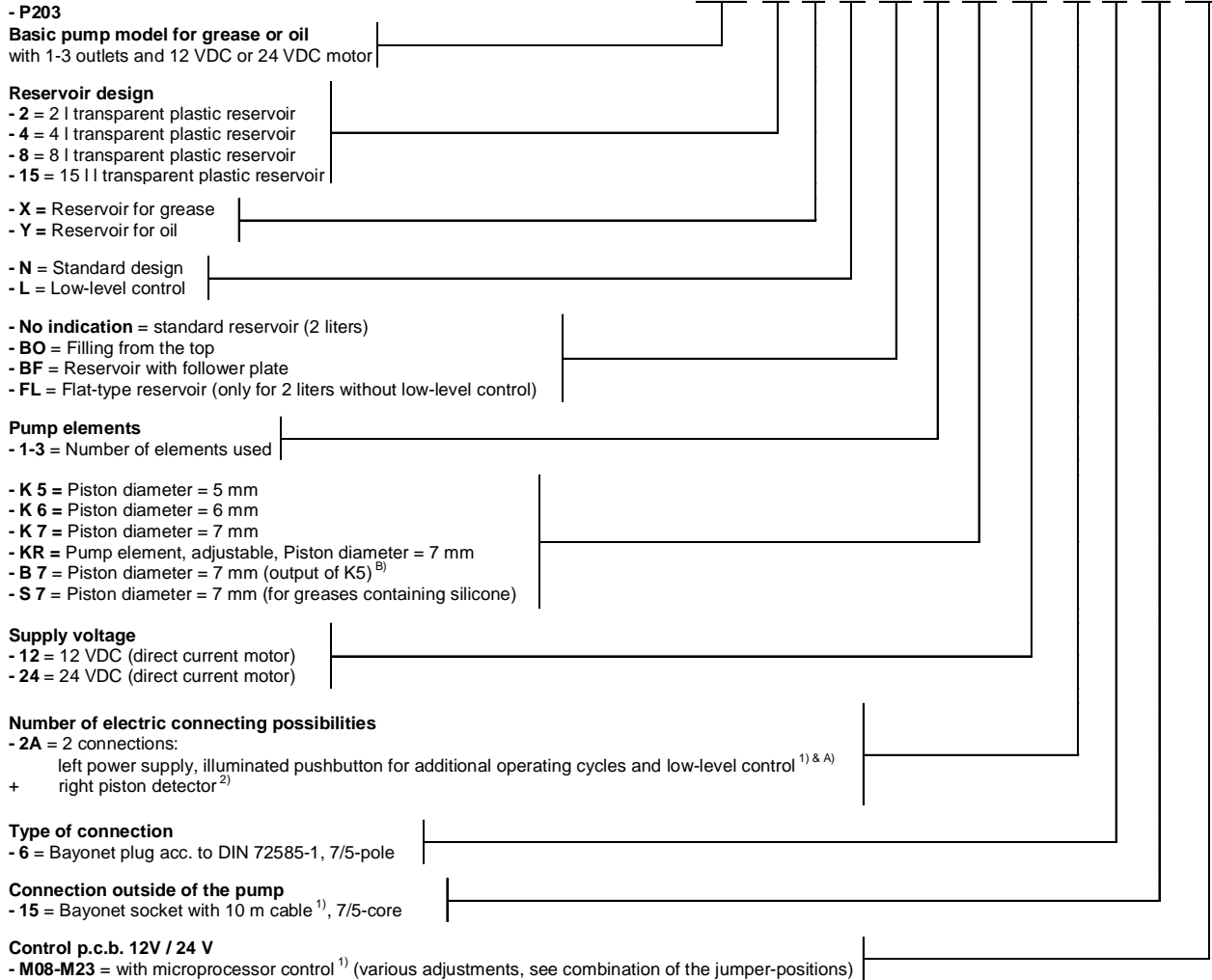


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NOTE

Any pumps combinations other the noted standard pumps can be composed and ordered in accordance with the valid model identification code.

P203	-	2	X	L	-	1	K6	-	24	-	2A	6.	15	-	M10		
P203	-	4	X	L	-	BO	-	1	KR	-	24	-	2A	6.	15	-	M12
P203	-	2	X	L	-	2	K5	-	12	-	2A	6.	15	-	M12		
P203	-	8	X	L	-	BO	-	1	K6	-	24	-	2A	6.	15	-	M08
P203	-	4	Y	L	-	BO	-	1	K7	-	12	-	2A	6.	15	-	M16
P203	-	2	X	L	-	1	K6	-	24	-	2A	6.	15	-	M23		



¹⁾ In conjunction with bayonet plugs (type of connection 6)

²⁾ Low-level control for oil; connection between low-level control and control p.c.b. is not possible and therefore, is not taken into consideration

^{A)} Piston detector, 4-pole

^{B)} For use at ambient conditions with a high degree of pollution or high dust concentration

Identification Code – pump variants P 203 AC, with and without control p.c.b. V10-V13, V20-V23, H

Examples of model designations



6001a02

NOTE

Any pumps combinations other the noted standard pumps can be composed and ordered in accordance with the valid model identification code.

P203 - 2	X	N	- 1	K6 - AC - 1A	1.	01 - V10
P203 - 4	X	L	BO - 1	KR - AC - 2A	1.	01 - V12
P203 - 2	X	N	- 2	K5 - AC - 1A	1.	01
P203 - 8	X	L	BO - 1	K6 - AC - 2A	5.	14 - V11
P203 - 4	Y	L	BO - 1	K7 - AC - 1A	1.	01 - V20
P203 - 2	X	L	- 1	K6 - AC - 2A	7.	16 - V10

- P203²⁾

Basic pump model for grease or oil
with 1-3 outlets and 12 VDC or 24 VDC motor

Reservoir design

- 2 = 2 l transparent plastic reservoir
- 4 = 4 l transparent plastic reservoir
- 8 = 8 l transparent plastic reservoir
- 15 = 15 l transparent plastic reservoir

- X = Reservoir for grease
- Y = Reservoir for oil

- N = Standard design
- L = Low-level control

- No indication = standard reservoir (2 liters)
- BO = Filling from the top
- FL = Flat-type reservoir (only for 2 liters without low-level control, not for oil)

Pump elements

- 1-3 = Number of elements used
- K 5 = Piston diameter = 5 mm
- K 6 = Piston diameter = 6 mm
- K 7 = Piston diameter = 7 mm
- KR = Pump element, adjustable, Piston diameter = 7 mm
- B 7 = Piston diameter = 7 mm (output of K5)^{A)}
- S 7 = Piston diameter = 7 mm (for greases containing silicone)

Supply voltage

- AC = 110-240 VAC ±10%, 50-60 Hz ±5% (with 24 VDC direct current motor)

Number of electric connecting possibilities

- 1A = 1 connection, left power supply¹⁾
- 2A = 2 connections, left bottom power supply¹⁾
 - either right only low-level control¹⁾
 - or left top only low-level control²⁾
 - or left top illuminated pushbutton for additional operating cycles and low-level control³⁾

Type of connection

- 1 = Square-type plug acc to DIN 43650, industrial application
- 5 = Bayonet plug acc. to DIN 72585-1, 4/3-pole (V10-13, 7/3-pole with V20-23, H)
- 7 = Bayonet plug acc. to DIN 72585-1, 7/6-pole (V10-13, V20-23)

Connection outside of the pump

- 01 = with socket, without cable¹⁾
- 14 = bayonet socket with 10 m cable²⁾, 4/3-core, (V10-13, 7/3-core with V20-23) without low-level control, without illuminated pushbutton
- 16 = bayonet socket with 10 m cable³⁾, 7/6-core (V10-13, V20-23), with low-level control or with illuminated pushbutton
- 70 = bayonet socket with 6 m cable, 7/3-core for USA

Control p.c.b. 12V / 24 V

- V10-V13 = with adjustable pause and lubricating time
- V20-V23 = with adjustable pause and lubricating time (US market)
- ohne Angabe = without control p.c.b.

¹⁾ In conjunction with square-type plugs (type of connection 1)
²⁾ In conjunction with bayonet plugs (type of connection 5)
³⁾ In conjunction with bayonet plugs (type of connection 7)
^{A)} For use at ambient conditions with a high degree of pollution or high dust concentration

Identification Code – pump variants P 203 AC, with control p.c.b. M08-M23

Examples of model designations



6001a02

NOTE

Any pumps combinations other the noted standard pumps can be composed and ordered in accordance with the valid model identification code.

P203 - 2	X	L	- 1	K6 - AC - 3A	6.	15 - M08
P203 - 4	X	L - BO - 1	KR - AC - 3A	6.	15 - M12	
P203 - 2	X	L	- 2	K5 - AC - 3A	6.	15 - M23
P203 - 8	X	L - BO - 1	K6 - AC - 3A	6.	15 - M09	
P203 - 4	Y	L - BO - 1	K7 - AC - 3A	6.	15 - M20	
P203 - 2	X	L	- 1	K6 - AC - 3A	6.	15 - M10

- P203, P203 UL¹⁾

Basic pump model for grease or oil
with 1-3 outlets and 12 VDC or 24 VDC motor

Reservoir design

- 2 = 2 l transparent plastic reservoir
- 4 = 4 l transparent plastic reservoir
- 8 = 8 l transparent plastic reservoir
- 15 = 15 l transparent plastic reservoir

- X = Reservoir for grease
- Y = Reservoir for oil

- L = Low-level control

- No indication = standard reservoir (2 liters)

- BO = Filling from the top

- BF = Reservoir with follower plate

- FL = Flat-type reservoir (only for 2 liters without low-level control, not for oil)

Pump elements

- 1-3 = Number of elements used

- K 5 = Piston diameter = 5 mm

- K 6 = Piston diameter = 6 mm

- K 7 = Piston diameter = 7 mm

- KR = Pump element, adjustable, Piston diameter = 7 mm

- B 7 = Piston diameter = 7 mm (output of K5)^{A)}

- S 7 = Piston diameter = 7 mm (for greases containing silicone)

Supply voltage

- AC = 110-240 VAC ±10%, 50-60 Hz ±5% (with 24 VDC direct current motor)

Number of electric connecting possibilities

- 3A = 3 connections:

left bottom power supply²⁾

left top illuminated pushbutton for additional operating cycles and low-level control³⁾

+ right piston detector³⁾

Type of connection

- 1 = Square-type plug acc. to DIN 43650, design A

- 6 = Bayonet plug acc. to DIN 72585-1¹⁾, 7/5-pole

Connection outside of the pump

- 15 = Bayonet socket with 10 m cable¹⁾, 7/5-core

Control p.c.b. 12V / 24 V

- M08-M23 = with microprocessor control¹⁾ (various adjustments, see combination of the jumper-positions)

¹⁾ UL proved pumps 203 can be ordered for the North American market

²⁾ In conjunction with square-type plugs (type of connection 1)

³⁾ In conjunction with bayonet plugs (type of connection 6)

^{A)} For use at ambient conditions with a high degree of pollution or high dust concentration

Scope of delivery of Quicklub pumps P 203



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The following parts belong to the scope of delivery of pump 203:

- **Pump housing** with 12 or 24 VDC motor
- **Reservoir**
 - 2-liter with grease filling 0.75 kg
 - 4-liter with grease filling 1.5 kg
 - 8-liter with grease filling 1.5 kg
- **Pump element(s):** 1 to 3 pump elements can be used
The following models are available:
for grease or oil supply with fixed lubricant output:
 - K5= Piston Ø5 mm; output 2 cm³/min
 - K6= Piston Ø6 mm; output 2.8 cm³/min
 - K7= Piston Ø7 mm; output 4 cm³/min
 - B7= Piston Ø7 mm; output 2 cm³/min
 - S7= Piston Ø7 mm; output 4 cm³/min
 - C7= Piston Ø7 mm; output 4 cm³/min*for grease or oil supply with adjustable lubricant output:*
 - KR= Piston Ø7 mm; output 0.04 cm³ - 0.18 cm³/stroke*for the supply of chisel paste (C7)*
 - C7= Piston Ø7 mm; output 4 cm³/min
- **Control p.c.b.** for 12/24 VDC
The following models are available:
V 10 - V 13, standard p.c.b.
M 08 - M 23, for system monitoring
H, for trailer or semitrailer
Pump without p.c.b.
Power supply p.c.b. for connection of pump to alternate current 120 or 230 VAC, 50/60 Hz
- **Electric Connections:** see selection guide DC and AC
without p.c.b., without low-level control
cube-type plug, left (black) with/without 10 m cable
without p.c.b. and low-level control
cube-type plug, left (black) with/without 10 m cable and

cube-type plug, right (grey) with/without 10 m cable (black)

- with p.c.b. V10-V13, without low-level control*
cube-type plug, left (black) with/without 10 m cable or
bayonet plug, left with 10 m cable
- with p.c.b. V10-V13 and low-level control*
cube-type plug, left (black) with/without 10 m cable and
cube-type plug, right (grey) with/without 10 m cable or
bayonet plug, left with 10 m cable
- with p.c.b. H, without low-level control*
cube-type plug, left (black) with 10 m cable or
bayonet plug, left with 10 m cable
- with p.c.b.s M 08 to M 23 and low-level control*
bayonet plug, left with 10 m cable and
bayonet socket, right for 1 or 2 piston detectors

- **Accessories:**
Pressure relief valve - must be ordered separately
(see respective line „Pressure Relief Valve“ in the following parts lists for different models)
Fixing screws with accessories, drilling template and operating instructions
Low-level control, if any. The parts are integrated in the pump housing and in the reservoir.

Subject to modifications

Components of Quicklub Pump Model 203

2-l reservoir for grease, closed

without low-level control
without control p.c.b.
connection type 1A1.01/10

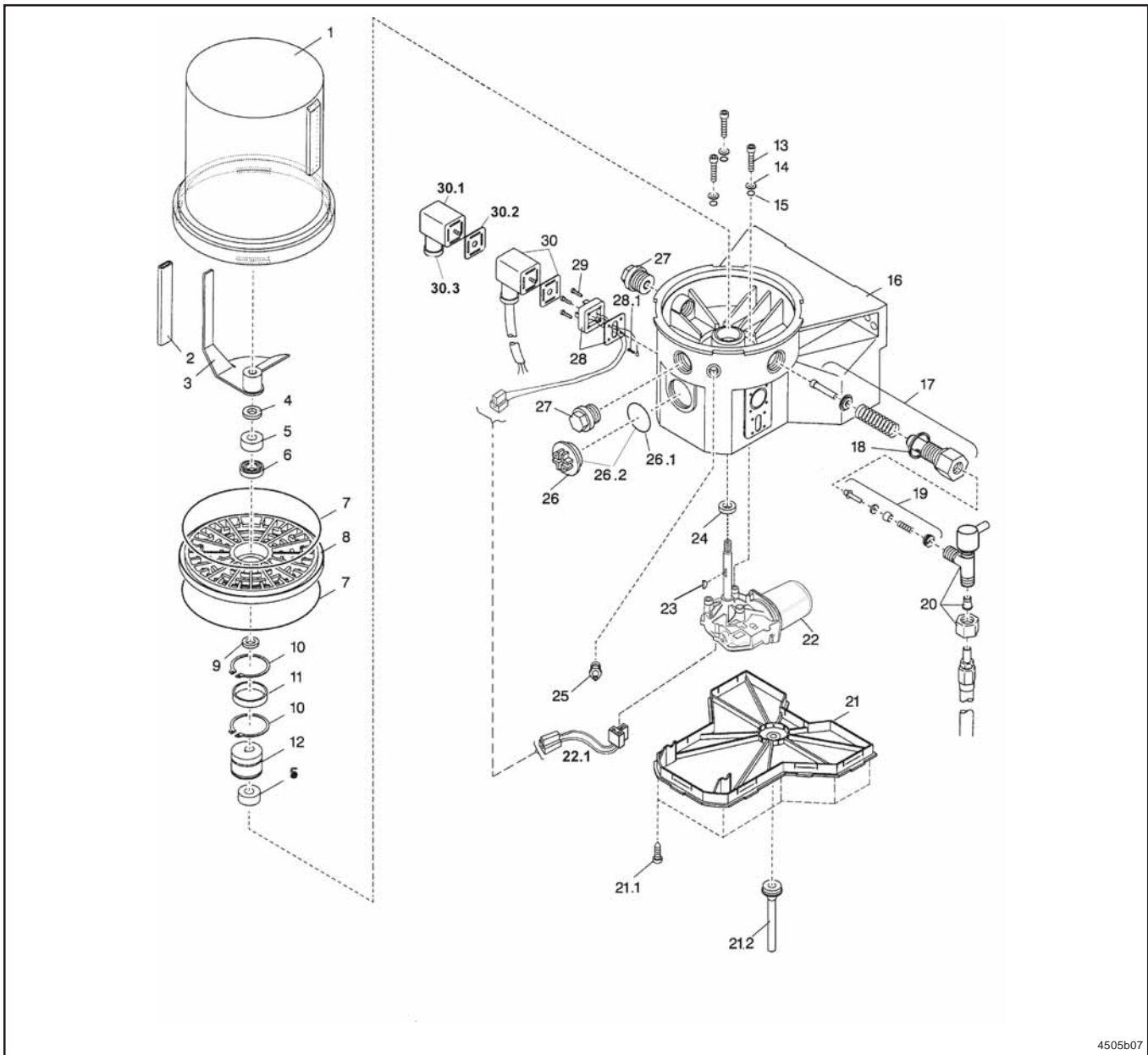


Fig. 1 - Explosion view for P 203 -2XN-.K.-12/24-1A1.01/10

Parts List acc. to Fig. 1

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XN	1	544-31996-1	21	Housing cover	1	444-24667-1
2	Hose 12.5 cm	1	111-35089-2		UL housing cover only for USA	1	444-70128-1
3	Stirring paddle, assy.	1	544-31882-1		Housing cover, assy. since 1996	1	544-32217-1
4	Washer 8.4	1	209-13072-6	21.1	Screw f. KF, 3x25	10	206-13796-7
5	Inner ring	2	444-24168-1	21.2	Drain hose	1	444-24310-1
6	Grooved ball bearing D10/26x8	1	250-14009-7	22	Motor ^{1,3}		
7	O-ring Ø142x4	2	219-13730-7		with pos. 7, 13, 15, 22.1, 24		
8	Intermediate bottom	1	444-24167-1		12 VDC	1	544-36913-3
9	Shim 10x16x0.5	1	209-13047-5		24 VDC	1	544-36913-4
10	Snap ring SW 32	2	211-14100-1		24 VDC for VAC connection ¹	1	544-36913-8
11	Pressure ring Ø33x37x13	1	444-24439-1	22.1	Adapter cable ⁴	1	664-34195-8
12	Eccentric	1	444-24170-2	23	Woodruff key 3x5	1	214-13123-1
13	Hexagon socket head screw M 6x25, self-tapping ³	3	206-13710-8	24	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Washer	3	444-24169-1	25	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø6x2	3	219-13084-2	26	Sealing plug, M33x2 incl.	1	233-13124-9
16	Housing Kit: housing assy. with housing cover and tightening screws UL housing only for USA	1 1 1	444-24666-1 544-32191-1 444-70131-1 444-70128-1	26.1	O-ring ø31x2	1	219-14138-2
17	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. C7=piston Ø7 mm, assy. for chisel paste KR=Pump element, adjustable	1 1 1 1 1	600-26875-2 600-26876-2 600-26877-2 600-28750-1 655-28716-1	26.2	Sealing plug with O-ring	1	544-32851-1
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	27	Closure plug M22x1.5x12	2	303-19285-1
19	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1 1 1	504-36071-8 504-36071-4 504-36071-9	28	Appliance plug 1 with cable	1	664-34195-5
20	Pressure relief valve ² SVTE - 350 - 1/4 - D 6	1	624-28894-1	28.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
				29	Screw BZ 3x10 C	4	206-13796-6
				30	Socket 1 (black) ¹		
					with flat packing and 10 m cable	1	664-36078-7
				30.1	Flat packing	1	236-13294-3
				30.2	Socket 1 (black)	1	236-13277-9
				30.3	Socket with flat packing	1	544-32850-1
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1

¹ deviations of the shown type of connection of pump 203, see pages 80-88

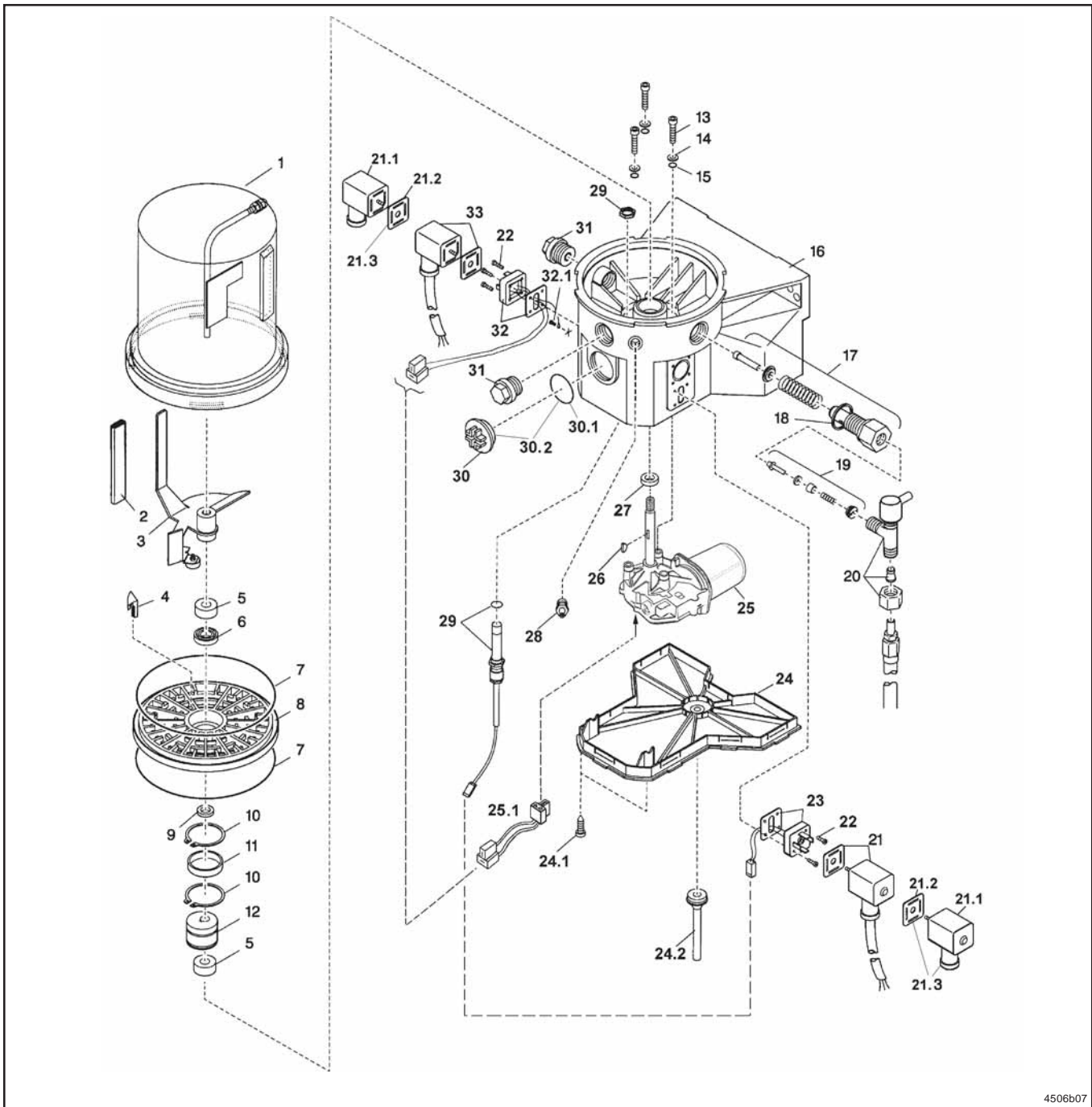
² other pressure relief valves see Parts Catalog

³ Motor housings have no fastening threads.

⁴ For fastening purposes use the self-tapping hexagonal socket head screws included in the kit. part of the motor kit.

2-l reservoir for grease, closed

with low-level control
without control p.c.b.
Connection type 2A1.01/10



4506b07

Fig. 2 - Explosion view for P 203 -2XL-.K.-12/24-2A1.01/10

Parts List acc. to Fig. 2

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XL	1	544-32028-1	23	Plug 2 with cable ²	1	664-36862-5
2	Hose 12.5 cm	1	111-35089-2	24	Housing cover	1	444-24667-1
3	Stirring paddle, assy.	1	544-31947-1		Housing cover, assy. since 1996	1	544-32217-1
4	Control cam	1	444-24212-1	24.1	Screw f. KF, 3x25	10	206-13796-7
5	Inner ring	2	444-24168-1	24.2	Drain hose	1	444-24310-1
6	Grooved ball bearing D 10/26x8	1	250-14009-7	25	Motor ^{1,4}		
7	O-ring Ø142x4	2	219-13730-7		with pos. 7, 13, 15, 25.1, 27		
8	Intermediate bottom	1	444-24167-1		12 VDC	1	544-36913-3
9	Shim 10x16x0.5	1	209-13047-5		24 VDC	1	544-36913-4
10	Snap ring SW 32	2	211-14100-1		24 VDC for VAC connection ¹	1	544-36913-8
11	Pressure ring ø33x37x13	1	444-24439-1	25.1	Adapter cable ⁵	1	664-34195-8
12	Eccentric	1	444-24170-2	26	Woodruff key 3x5	1	214-13123-1
13	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Washer	3	444-24169-1	28	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø6x2	3	219-13084-2	29	Magnetic switch	1	234-13162-5
16	Housing	1	444-24666-1	30	Sealing plug, M33x2 incl.	1	233-13124-9
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	30.1	O-ring ø31x2	1	219-14138-2
17	Pump element with K5=piston Ø5 mm, assy.	1	600-26875-2	30.2	Sealing plug with O-ring	1	544-32851-1
	K6=piston Ø6 mm, assy.	1	600-26876-2	31	Closure plug M22x1.5x12	2	303-19285-1
	K7=piston Ø7 mm, assy.	1	600-26877-2	32	Appliance plug 1 with cable ¹	1	664-34195-5
	C7=piston Ø7 mm, assy. for chisel paste	1	600-28750-1	32.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	KR=Pump element, adjustable	1	655-28716-1	33	Socket 1 (black) ¹		
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1		with flat packing and 10 m cable	1	664-36078-7
19	Check valve Ø5 mm, assy.	1	504-36071-8		Power supply board 230 VAC ¹	1	544-36961-4
	Check valve Ø6 mm, assy.	1	504-36071-4		Arrow: direction of rotation	1	810-55106-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Lincoln-Logo sticker	1	810-55087-1
20	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1				
21	Socket 2 (grey) ^{1,2} with flat packing and 10 m cable	1	664-36078-9				
21.1	Flat packing ^{1,2}	1	236-13294-3				
21.2	Socket 1 (black)	1	236-13277-9				
21.3	Socket with flat packing ^{1,2}	1	544-32850-1				
22	Screw BZ 3.0x10 C	8	206-13796-6				

¹ deviation of the shown connection type of pump 203, see pages 80-88

² only with type of connection 2A1

³ other pressure relief valves see Parts Catalogue

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁵ part of the motor kit.

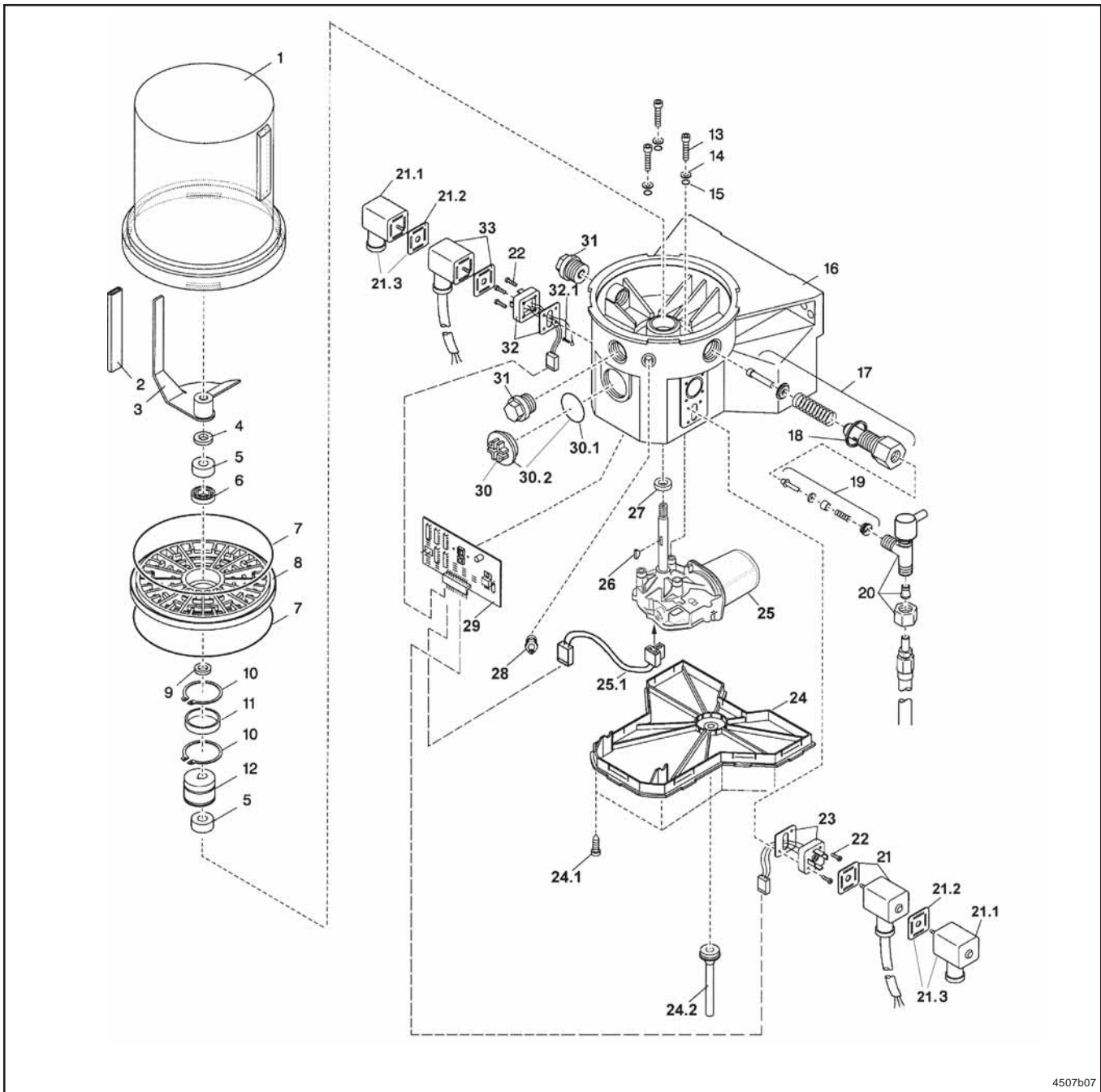
Subject to modifications

2-l reservoir for grease, closed

without low-level control

P.c.b. models V10 - V13, V20 - V23, H, V10 - V13 ADR, H ADR

Connection types 1A1.01/10, 2A1.01/10



4507b07

Fig. 3 - Explosion view for P 203 -2XN-K-12/24-1/2A1.01/10-V..., H, V... ADR, H ADR

Parts List acc. to Fig. 3

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XN	1	544-31996-1	24	Housing cover	1	444-24667-1
2	Hose 12.5 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
3	Stirring paddle, assy.	1	544-31882-1	24.1	Screw f. KF, 3x25	10	206-13796-7
4	Washer 8.4	1	209-13072-6	24.2	Drain hose	1	444-24310-1
5	Inner ring	2	444-24168-1	25	Motor ^{1,5}		
6	Grooved ball bearing D 10/26x8	1	250-14009-7		with pos. 7, 13, 15, 25.1, 27		
7	O-ring Ø142x4	2	219-13730-7		12 VDC	1	544-36913-6
8	Intermediate bottom	1	444-24167-1		24 VDC	1	544-36913-7
9	Shim 10x16x0.5	1	209-13047-5		24 VDC for VAC connection ¹	1	544-36913-8
10	Snap ring SW 32	2	211-14100-1	25.1	Motor connection	1	664-34195-2
11	Pressure ring Ø33x37x13	1	444-24439-1	26	Woodruff key 3x5	1	214-13123-1
12	Eccentric	1	444-24170-2	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8	28	Hydraulic lube fitting AR 1/4 Z	1	251-14045-9
14	Washer	3	444-24169-1	29	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
15	O-ring Ø6x2	3	219-13084-2		Model V10 - V13	1	236-13891-1
16	Housing	1	44424666-1		Model V20 - V23 ³	1	236-13891-2
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1		Model H	1	236-13857-1
17	Pump element with				Model M... ¹	1	236-13870-3
	K5=piston Ø5 mm, assy.	1	600-26875-2	30	Sealing plug, M33x2 incl.	1	
	K6=piston Ø6 mm, assy.	1	600-26876-2	30.1	O-ring ø31x2	1	544-32851-1
	K7=piston Ø7 mm, assy.	1	600-26877-2	30.2	Sealing plug with O-ring	1	544-32851-1
	KR=Pump element, adjustable	1	655-26178-1	31	Closure plug M22x1.5x12	2	303-19285-1
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	32	Appliance plug 1 with cable ¹	1	664-36917-9
19	Check valve Ø5 mm, assy.	1	504-36071-8	32.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	Check valve Ø6 mm, assy.	1	504-36071-4	33	Socket 1 (black) ¹ with -flat packing and 10 m cable	1	664-36078-7
	Check valve Ø7 mm, assy.	1	504-36071-9		-flat packing and 10 m cable, for ADR-pump	1	664-36862-1
20	Pressure relief valve ⁴				Power supply board 230 VAC ¹	1	544-36961-4
	SVTE - 350 - 1/4 - D 6	1	624-28894-1		Arrow: direction of rotation	1	810-55106-1
21	Socket 2 (grey) ^{1,2} with - flat packing and 10 m cable	1	664-36078-9		Lincoln-Logo sticker	1	810-55087-1
	- flat packing and 10 m cable, for ADR-pump	1	664-36862-2		Jumper for control p.c.b.	1	236-13898-1
21.1	Socket 1/2 (black) ^{1,2}	2	236-13277-9				
21.2	Flat packing	2	236-13294-3				
21.3	Socket with flat packing ^{1,2}						
22	Screw BZ 3x10 C	8	206-13796-6				
23	Plug 2 with cable ²	1	664-36862-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves see Parts Catalog

⁵ Motor housings have no fastening threads.

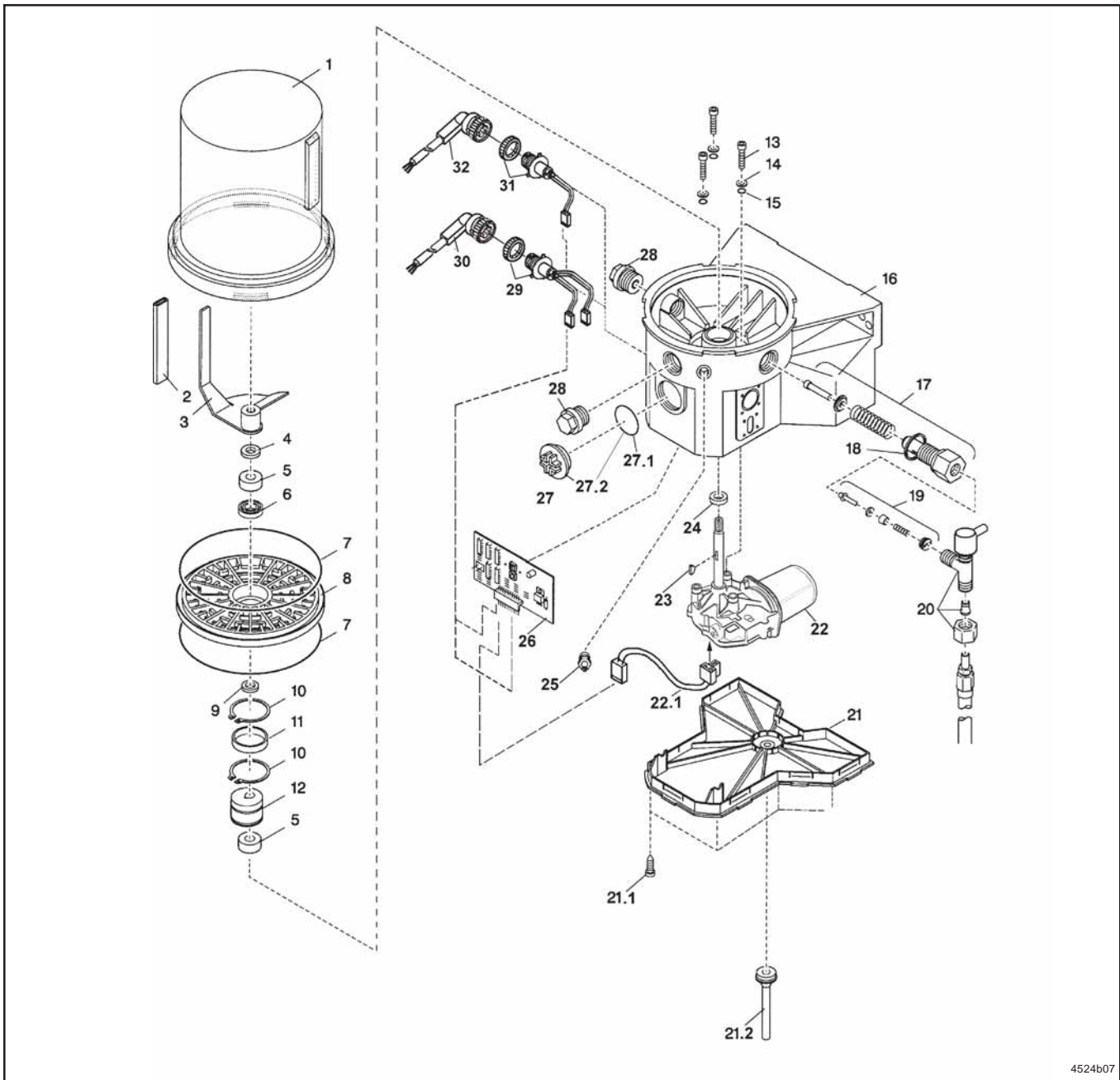
For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

2-l reservoir for grease, closed

without low-level control

P.c.b. versions V10 - V13, V20 - V23, H, V10 - V13 ADR, H ADR

Connection types 1A5.14, 1A7.16, 1A5.17 (ADR)



4524b07

Fig. 4 - Explosion view for P 203 -2XN-.K-12/24-1A5.14/1A7.16/1A5.17-V....., H, V...ADR, H ADR

Parts List acc. to Fig. 4

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XN	1	544-31996-1	21.1	Screw f. KF, 3x25	10	206-13796-7
2	Hose 12.5 cm	1	111-35089-2	21.2	Drain hose	1	444-24310-1
3	Stirring paddle, assy.	1	544-31882-1	22	Motor ^{1,4}		
4	Washer 8.4	1	209-13072-6		with pos. 7, 13, 15, 22.1, 24		
5	Inner ring	2	444-24168-1		12 VDC	1	544-36913-6
6	Grooved ball bearing D 10/26x8	1	250-14009-7		24 VDC	1	544-36913-7
7	O-ring Ø142x4	2	219-13730-7		24 VDC for VAC connection ¹	1	544-36913-8
8	Intermediate bottom	1	444-24167-1	22.1	Motor connection	1	664-34195-2
9	Shim 10x16x0.5	1	209-13047-5	23	Woodruff key 3x5	1	214-13123-1
10	Snap ring SW 32	2	211-14100-1	24	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	Pressure ring Ø33x37x13	1	444-24439-1	25	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Eccentric	1	444-24170-2	26	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
13	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8		Model V10 - V13	1	236-13891-1
14	Washer	3	444-24169-1		Model V20 - V23 ²	1	236-13891-2
15	O-ring Ø6x2	3	219-13084-2		Model H	1	236-13857-1
16	Housing	1	444-24666-1		Model M... ¹	1	236-13870-3
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	27	Sealing plug, M33x2 incl.	1	233-13124-9
17	Pump element with			27.1	O-ring ø31x2	1	219-14138-2
	K5=piston Ø5 mm, assy.	1	600-26875-2	27.2	Sealing plug with O-ring	1	544-32851-1
	K6=piston Ø6 mm, assy.	1	600-26876-2	28	Closure plug M22x1.5x12	2	303-19285-1
	K7=piston Ø7 mm, assy.	1	600-26877-2	29	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
	KR=Pump element, adjustable	1	655-26178-1	30	Bayonet cable, 7/6-core	1	664-34167-5
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	31	Bayonet plug 1 with cable ¹ , 4/3-pole (1A5.14)	1	664-34041-5
19	Check valve Ø5 mm, assy.	1	504-36071-8	32	Bayonet cable, 4/3-core	1	664-34167-6
	Check valve Ø6 mm, assy.	1	504-36071-4		Bayonet cable, 4/3-core ADR	1	664-34167-8
	Check valve Ø7 mm, assy.	1	504-36071-9				
20	Pressure relief valve ³				Power supply board 230 VAC ¹	1	544-36961-4
	SVTE - 350 - 1/4 - D 6	1	624-28894-1		Arrow: direction of rotation	1	810-55106-1
21	Housing cover	1	444-24667-1		Lincoln-Logo sticker	1	810-55087-1
	Housing cover, assy. since 1996	1	544-32217-1		Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

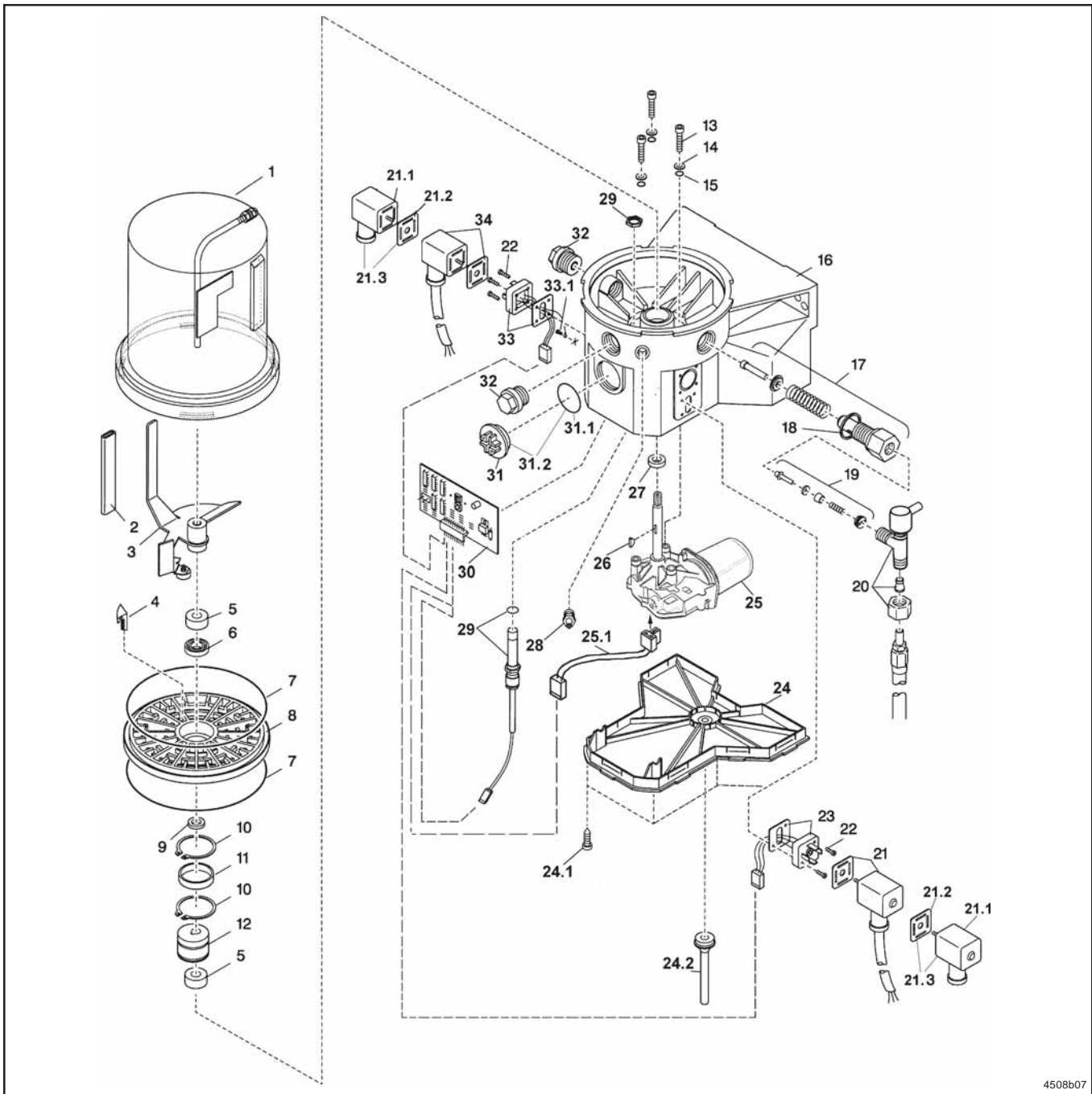
Subject to modifications

2-l reservoir for grease, closed

with low-level control

P.c.b. versions V10 - V13, V20 - V23, V10-V13 ADR

Connection type 2A1.01/10



4508b07

Fig. 5 - Explosion view for P 203 -2XL-.K.-12/24-1/2A1.01/10-V..., V...ADR

Parts List acc. to Fig. 5

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XL	1	544-32028-1	24	Housing cover	1	444-24667-1
2	Hose 12.5 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
3	Stirring paddle, assy.	1	544-31947-1	24.1	Screw f. KF, 3x25	10	206-13796-1
4	Control cam	1	444-24212-1	24.2	Drain hose	1	444-24310-1
5	Inner ring	2	444-24168-1	25	Motor ^{1,5}		
6	Grooved ball bearing D 10/26x8	1	250-14009-7		with pos. 7, 13, 15, 25.1, 27		
7	O-ring Ø142x4	2	219-13730-7		12 VDC	1	544-36913-6
8	Intermediate bottom	1	444-24167-1		24 VDC	1	544-36913-7
9	Shim 10x16x0.5	1	209-13047-5		24 VDC for VAC connection ¹	1	544-36913-8
10	Snap ring SW 32	2	211-14100-1	25.1	Motor connection	1	664-34195-2
11	Pressure ring Ø 33x37x13	1	444-24439-1	26	Woodruff key 3x5	1	214-13123-1
12	Eccentric	1	444-24170-2	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8	28	Hydraulic lube fitting AR 1/4 C	1	251-14045-9
14	Washer	3	444-24169-1	29	Magnetic switch for low-level control	1	234-13162-4
15	O-ring Ø6x2	3	219-13084-2	30	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
16	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1 544-32191-1		Model V10 - V13	1	236-13891-1
17	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. KR=Pump element, adjustable	1	600-26875-2 600-26876-2 600-26877-2 655-26178-1		Model V20 - V23 ³	1	236-13891-2
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Model H	1	236-13857-1
19	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1	504-36071-8 504-36071-4 504-36071-9		Model M... ¹	1	236-13870-3
20	Pressure relief valve ⁴ SVTE - 350 - 1/4 - D 6	1	624-28894-1	31	Sealing plug, M33x2 incl.	1	233-13124-9
21	Socket 2 (grey) ^{1,2} with - flat packing and 10 m cable - flat packing and 10 m cable for ADR-pump	1	664-36078-9 664-36862-2	31.1	O-ring ø31x2	1	219-14138-2
21.1	Socket 1/2 (black) ^{1,2}	2	236-13277-9	31.2	Sealing plug with O-ring	1	544-32851-1
21.2	Flat packing	2	236-13294-3	32	Closure plug M22x1.5x12	2	303-19285-1
21.3	Socket with flat packing ^{1,2}	2	544-32850-1	33	Appliance plug 1 with cable ¹	1	664-36917-9
22	Screw BZ 3x10 C	8	206-13796-6	33.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
23	Appliance plug 2 with cable ²	1	664-36862-5	34	Socket 1 (black) ¹ with -flat packing and 10 m cable -flat packing and 10 m cable, for ADR-version	1	664-36078-7 664-36862-1
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

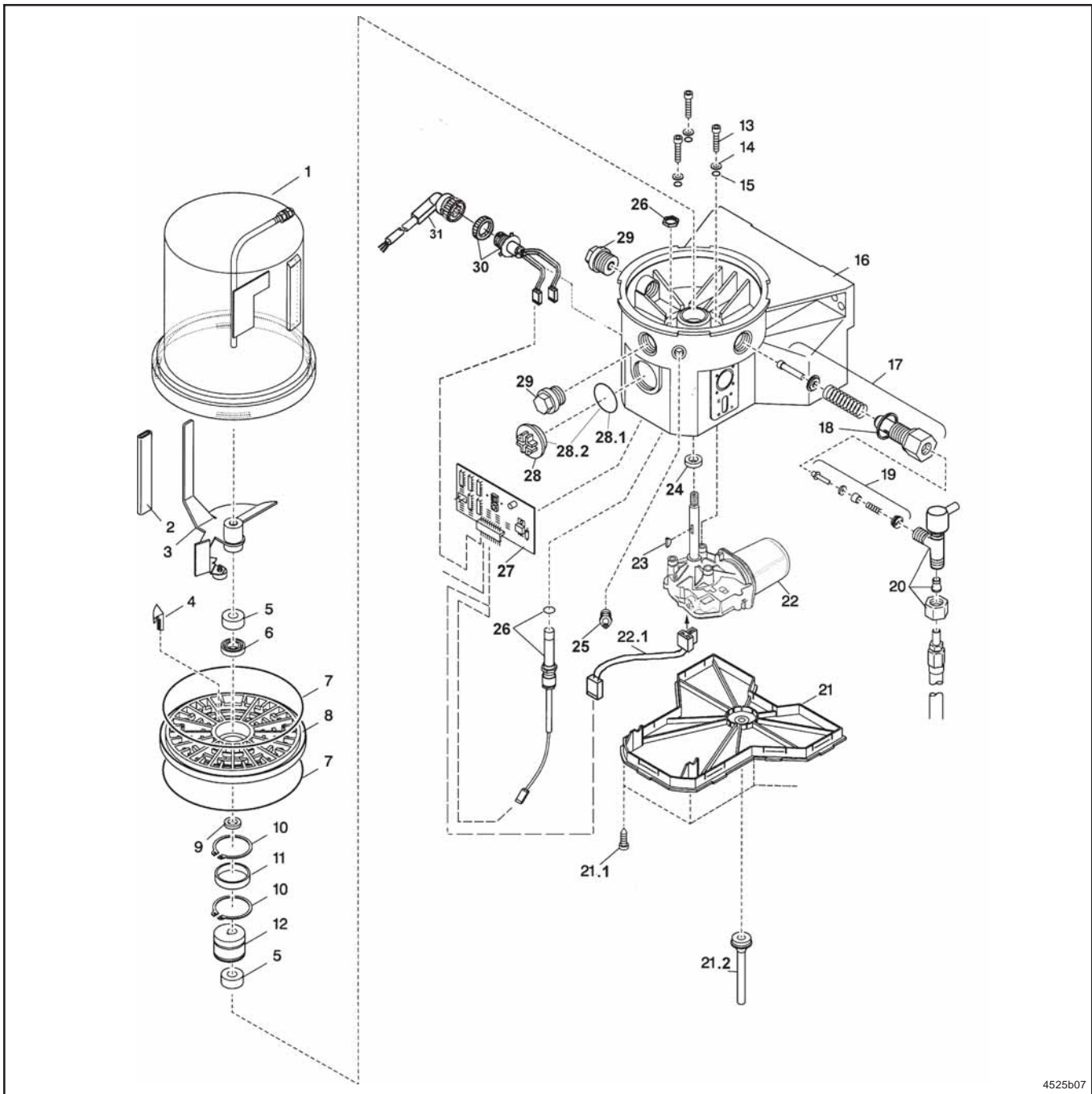
Subject to modifications

2-l reservoir for grease, closed

with low-level control

P.c.b. versions V10 - V13, V20 - V23

Connection type 1A7.16



4525b07

Fig. 6 - Explosion view for P 203 -2XL-.K.-12/24-1A7.16 V...

Parts List acc. to Fig. 6

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XL	1	544-32028-1	21	Housing cover	1	444-24667-1
2	Hose 12.5 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
3	Stirring paddle, assy.	1	544-31947-1	21.1	Screw f. KF, 3x25	10	206-13796-1
4	Control cam	1	444-24212-1	21.2	Drain hose	1	444-24310-1
5	Inner ring	2	444-24168-1	22	Motor ^{1,4}		
6	Grooved ball bearing D 10/26x8	1	250-14009-7		with pos. 7, 13, 15, 22.1, 24		
7	O-ring Ø142x4	2	219-13730-7		12 VDC	1	544-36913-6
8	Intermediate bottom	1	444-24167-1		24 VDC	1	544-36913-7
9	Shim 10x16x0.5	1	209-13047-5		24 VDC for VAC connection ¹	1	544-36913-8
10	Snap ring SW 32	2	211-14100-1	22.1	Motor connection	1	664-34195-2
11	Pressure ring Ø33x37x13	1	444-24439-1	23	Woodruff key 3x5	1	214-13123-1
12	Eccentric	1	444-24170-2	24	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	25	Hydraulic lube fitting AR 1/4 C	1	251-14045-9
14	Washer	3	444-24169-1	26	Magnetic switch for low-level control	1	234-13162-4
15	O-ring Ø6x2	3	219-13084-2	27	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
16	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1 544-32191-1		Model V10 - V13	1	236-13891-1
17	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. KR=Pump element, adjustable	1	600-26875-2 600-26876-2 600-26877-2 655-26178-1		Model V20 - V23 ²	1	236-13891-2
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Model H	1	236-13857-1
19	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1	504-36071-8 504-36071-4 504-36071-9		Model M... ¹	1	236-13870-3
20	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1	28	Sealing plug, M33x2 incl.	1	233-13124-9
				28.1	O-ring ø31x2	1	219-14138-2
				28.2	Sealing plug with O-ring	1	544-32851-1
				29	Closure plug M22x1.5x12	2	303-19285-1
				30	Bayonet plug, 7/6-pole	1	664-34167-3
				31	Bayonet cable, 7/6-core	1	664-34167-5
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

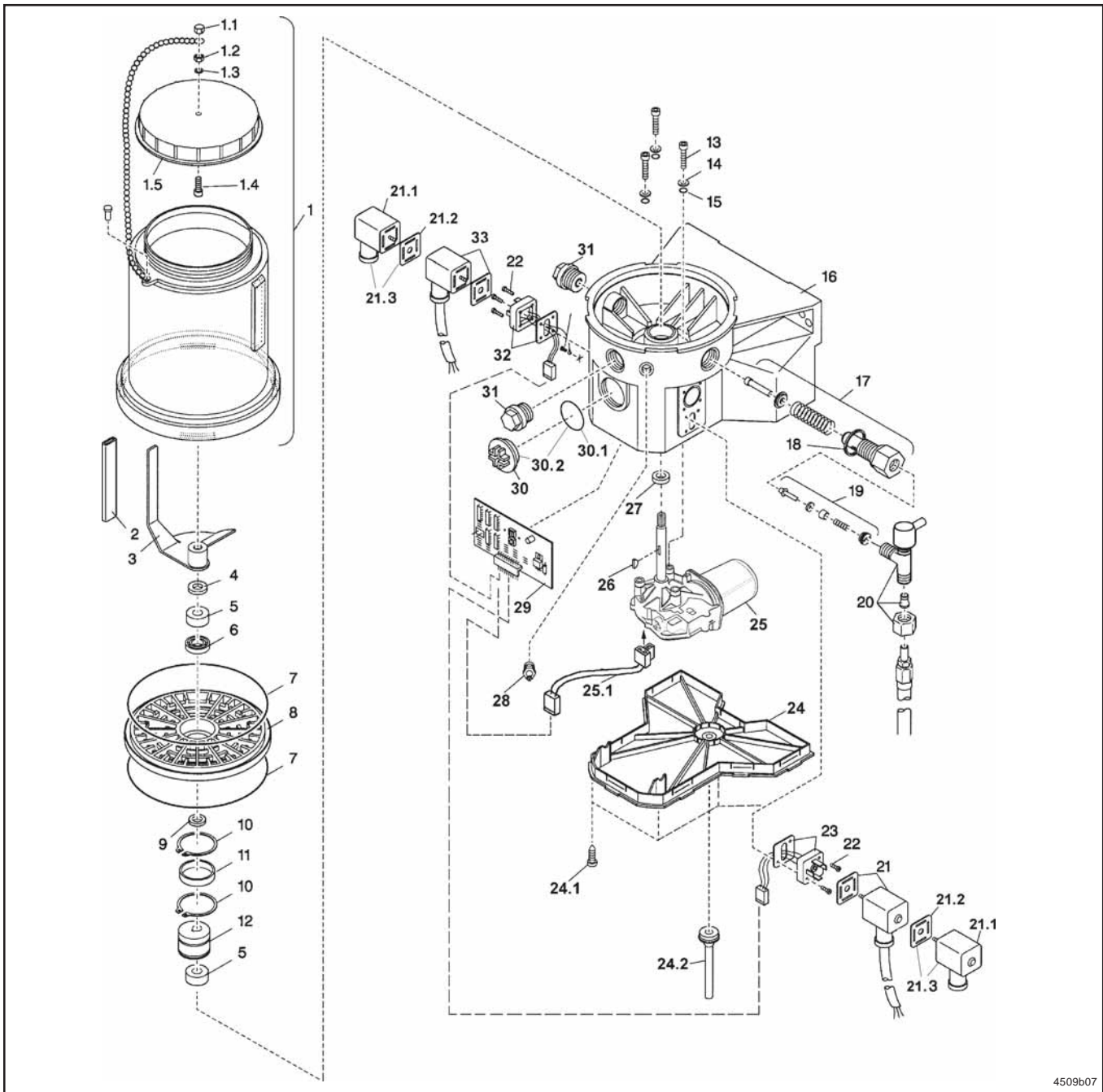
Subject to modifications

2-l reservoir for grease or oil

without low-level control

P.c.b. versions V10 - V13, V20 - V23

Connection types 1A1.01/10, 2A1.01/10



4509b07

Fig. 7 - Explosion view for P 203 -2X/YNBO-.K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 7

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2XNBO	1	544-31940-1	21	Socket 2 (grey) ^{1, 2} with - flat packing and 10 m cable	1	664-36078-9
1.1	Acorn nut M 4 C	1	207-12247-5		- flat packing and 10 m cable, for ADR-pump	1	664-36862-2
1.2	Hexagonal nut M 4 C	1	207-12135-2	21.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9
1.3	Washer A 4,3 C	1	209-12146-2	21.2	Flat packing	2	236-13294-3
1.4	Hexagonal head screw M4x16 C	1	201-12015-4	21.3	Socket with flat packing ^{1,2}	1	544-32850-1
1.5	Reservoir lid	1	221-12488-5	23	Screw BZ 3 x 10 C	8	206-13796-6
2	Hose 12.5 cm	1	111-35089-2	24	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
3	Stirring paddle, assy.	1	544-31882-1	24	Housing cover	1	444-24667-1
4	Washer 8.4	1	209-13072-6		Housing cover, assy. since 1996	1	544-32217-1
5	Inner ring	2	444-24168-1	24.1	Screw f. KF, 3x25	10	206-13796-7
6	Grooved ball bearing D 10/26x8	1	250-14009-7	24.2	Drain hose	1	444-24310-1
7	O-ring Ø142x4	2	219-13730-7	25	Motor ^{1, 5} with pos. 7, 13, 15, 25.1, 27		
8	Intermediate bottom	1	444-24167-1		12 VDC	1	544-36913-6
9	Shim 10x16x0.5	1	209-13047-5		24 VDC	1	544-36913-7
10	Snap ring SW 32	2	211-14100-1		24 VDC for VAC connection ¹	1	544-36913-8
11	Pressure ring Ø33x37x13	1	444-24439-1	25.1	Motor connection	1	664-34195-2
12	Eccentric	1	444-24170-2	26	Woodruff key 3x5	1	214-13123-1
13	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Washer	3	444-24169-1	28	Hydraulic lube fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø6x2	3	219-13084-2	29	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
16	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1		Model V10 - V13	1	236-13891-1
17	Pump element with K5=piston Ø5 mm, assy.	1	544-32191-1		Model V20 - V23 ³	1	236-13891-2
	K6=piston Ø6 mm, assy.	1	600-26875-2		Model H	1	236-13857-1
	K7=piston Ø7 mm, assy.	1	600-26876-2		Model M... ¹	1	236-13870-3
	C7=piston Ø7 mm, assy. for chisel paste	1	600-26877-2	30	Sealing plug, M33x2 incl.	1	233-13124-9
	KR=Pump element, adjustable	1	600-28750-1	30.1	O-ring ø31x2	1	219-14138-2
18	Sealing ring Ø22.2x27x1.5	1	655-26178-1	30.2	Sealing plug with O-ring	1	544-32851-1
19	Check valve Ø5 mm, assy.	1	306-17813-1	31	Closure plug M22x1.5x12	2	303-19285-1
	Check valve Ø6 mm, assy.	1	504-36071-8	32	Appliance plug 1 with cable ¹	1	664-36917-9
	Check valve Ø7 mm, assy.	1	504-36071-4	32.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
20	Pressure relief valve ⁴ SVTE - 350 - 1/4 - D 6	1	504-36071-9	33	Socket 1 (black) ¹ with - flat packing and 10 m cable	1	664-36078-7
			624-28894-1		Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

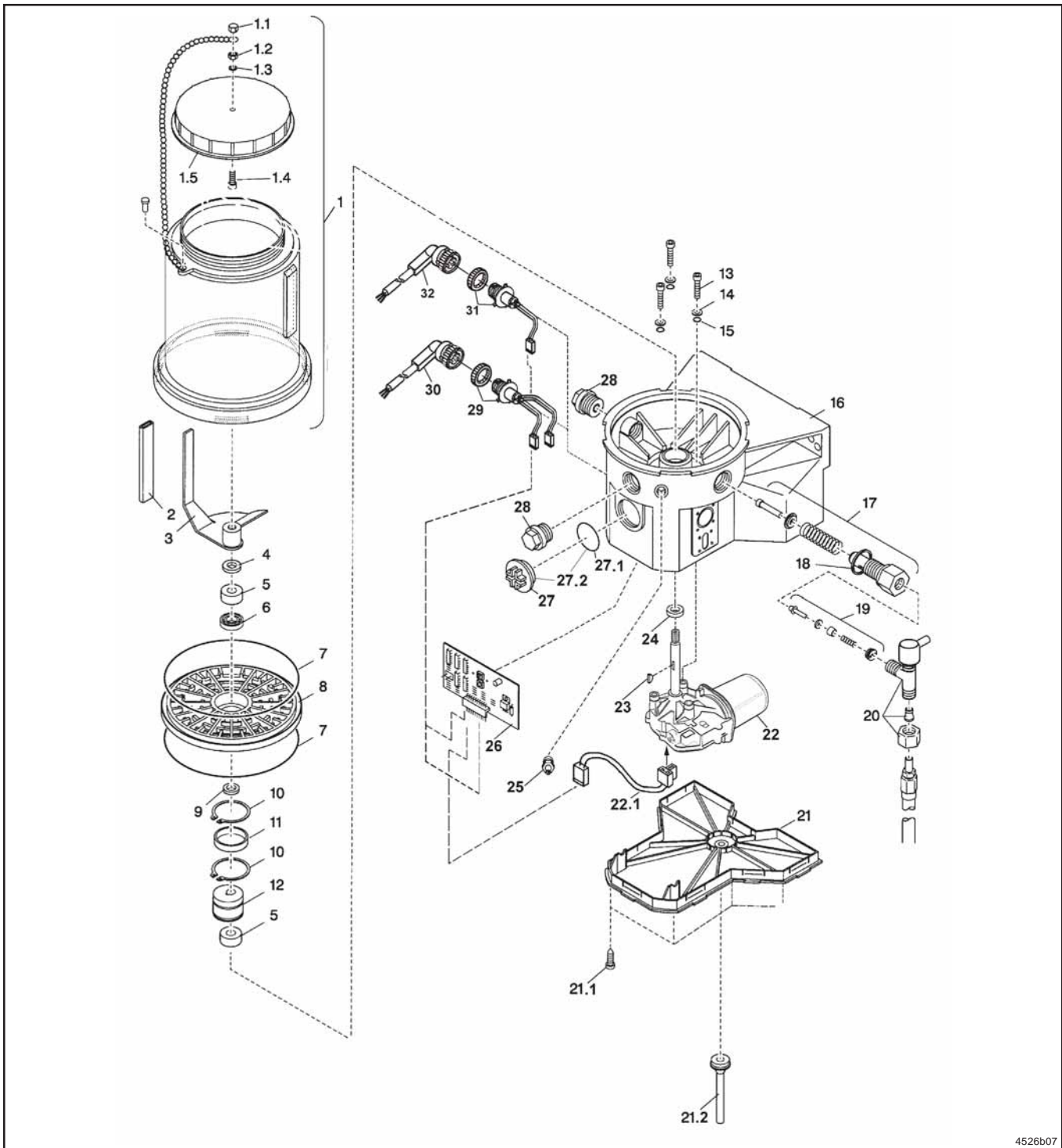
Subject to modifications

2-l reservoir for grease or oil

without low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1A5.14, 1A7.16



4526b07

Fig. 8 - Explosion view for P 203 -2X/YNBO-.K.-12/24-1A5.14/1A7.16-V...

Parts List acc. to Fig. 8

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2XNBO	1	544-31940-1	21	Housing cover	1	444-24667-1
1.1	Acorn nut M4 C	1	207-12247-5		Housing cover, assy. since 1996	1	544-32217-1
1.2	Hexagonal nut M4 C	1	207-12135-2	21.1	Screw f. KF, 3x25	10	206-13796-7
1.3	Washer A 4.3 C	1	209-12146-2	21.2	Drain hose	1	444-24310-1
1.4	Hexagonal head screw M4x16 C	1	201-12015-4	22	Motor ^{1,4} with pos. 7, 13,15, 22.1, 24		
1.5	Reservoir lid	1	221-12488-5		12 VDC	1	544-36913-6
2	Hose 12.5 cm	1	111-35089-2		24 VDC	1	544-36913-7
3	Stirring paddle, assy.	1	544-31882-1		24 VDC for VAC connection ¹	1	544-36913-8
4	Washer 8.4	1	209-13072-6	22.1	Motor connection, old ²	1	664-36862-3
5	Inner ring	2	444-24168-1		Motor connection, new	1	664-34195-2
6	Grooved ball bearing D 10/26x8	1	250-14009-7	23	Woodruff key 3x5	1	214-13123-1
7	O-ring Ø142x4	2	219-13730-7	24	Rotary shaft seal BA 10x22x7	1	220-12231-3
8	Intermediate bottom	1	444-24167-1	25	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
9	Shim 10x16x0.5	1	209-13047-5	26	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
10	Snap ring SW 32	2	211-14100-1		Model V10 - V13	1	236-13891-1
11	Pressure ring Ø33x37x13	1	444-24439-1		Model V20 - V23 ²	1	236-13891-2
12	Eccentric	1	444-24170-2		Model H	1	236-13857-1
13	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8		Model M... ¹	1	236-13870-3
14	Washer	3	444-24169-1	27	Sealing plug, M33x2 incl.	1	
15	O-ring Ø6x2	3	219-13084-2		27.1 O-ring ø31x2	1	544-32851-1
16	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	28	Closure plug M22x1.5x12	2	303-19285-1
17	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. C7=piston Ø7 mm, assy. for chisel paste KR=Pump element, adjustable	1 1 1 1 1 1	544-32191-1 600-26875-2 600-26876-2 600-26877-2 600-28750-1 655-26178-1	29	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	30	Bayonet cable, 7/6-core	1	664-34167-5
19	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1 1 1	504-36071-8 504-36071-4 504-36071-9	31	Bayonet plug 1 with cable ¹ , 4/3-pole (1A5.14)	1	664-34041-5
20	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1	32	Bayonet cable, 4/3-core	1	664-34167-6
					Power supply board 230 VAC ¹ Arrow: direction of rotation Lincoln-Logo sticker Jumper for control p.c.b.	1 1 1 1	544-36961-4 810-55106-1 810-55087-1 236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

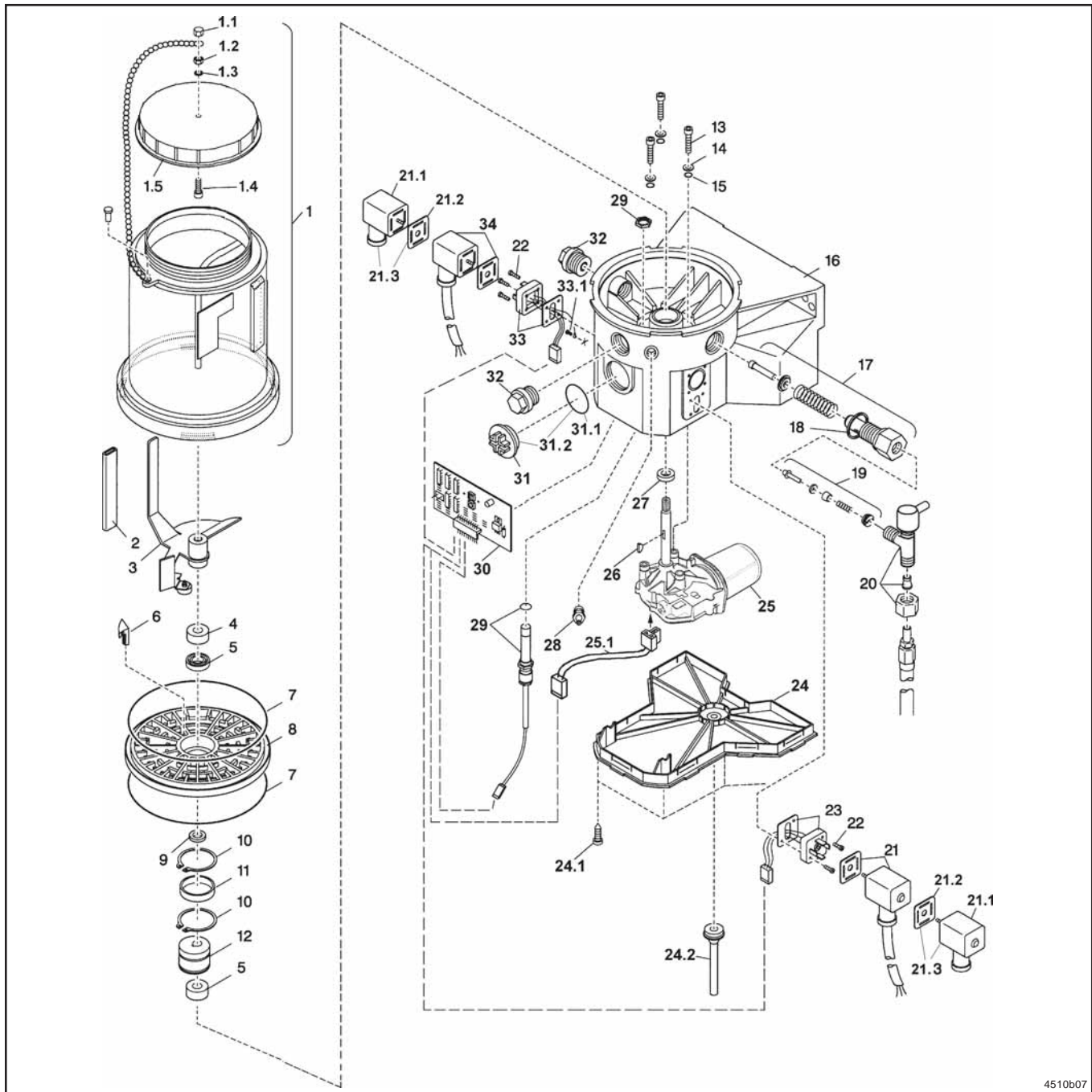
Subject to modifications

2-l reservoir for grease

with low-level control

P.c.b. versions V10 - V13, V20 - V23

connection type 2A1.01/10



4510b07

Fig. 9 - Explosion view for P 203 -2XLBO-K.-12/24--2A1.01/10-V...

Parts List acc. to Fig. 9

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XLBO	1	544-32027-1	21	Socket 2 (grey) ^{1, 2} with		
1.1	Acorn nut M4 C	1	207-12247-5		- flat packing and 10 m cable	1	664-36078-9
1.2	Hexagonal nut M4 C	1	207-12135-2		- flat packing and 10 m cable,		
1.3	Washer A 4.3 C	1	209-12146-2		for ADR-version	1	664-36862-2
1.4	Hexagonal head screw			21.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9
	M4x14 C	1	201-12051-4	21.2	Flat packing	2	236-13294-3
1.5	Reservoir lid	1	221-12488-5	21.3	Socket with flat packing ^{1, 2}	2	544-32850-1
2	Hose 12.5 cm	1	111-35089-2	22	Screw BZ 3x10 C	8	206-13796-6
3	Stirring paddle, assy.	1	544-31947-1	23	Appliance plug 2 with cable ²	1	664-36862-5
4	Inner ring	2	444-24168-1	24	Housing cover	1	444-24667-1
5	Grooved ball bearing D 10/26x8	1	250-14009-7		Housing cover, assy. since 1996	1	544-32217-1
6	Control cam	1	444-24212-1	24.1	Screw f. KF, 3x25	10	206-13796-7
7	O-ring Ø142x4	2	219-13730-7	24.2	Drain hose	1	444-24310-1
8	Intermediate bottom	1	444-24167-1	25	Motor ^{1, 5}		
9	Shim 10x16x0.5	1	209-13047-5		with pos. 7, 13, 15, 25.1, 27		
10	Snap ring SW 32	2	211-14100-1		12 VDC	1	544-36913-6
11	Pressure ring Ø33x37x13	1	444-24439-1		24 VDC	1	544-36913-7
12	Eccentric	1	444-24170-2		24 VDC for VAC connection ¹	1	544-36913-8
13	Hexagon socket head screw			25.1	Motor connection	1	664-34195-2
	M6x25, self-tapping ⁵	3	206-13710-8	26	Woodruff key 3x5	1	214-13123-1
14	Washer	3	444-24169-1	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
15	O-ring Ø6x2	3	219-13084-2	28	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
16	Housing	1	444-24666-1	29	Magnetic switch for		
	Kit: housing assy. with housing				low-level control	1	234-13162-4
	cover and tightening screws	1	544-32191-1	30	Control p.c.b. 12/24 VDC ¹ for industrial		
17	Pump element with				application and commercial vehicles		
	K5=piston Ø5 mm, assy.	1	600-26875-2		Model V10 - V13	1	236-13891-1
	K6=piston Ø6 mm, assy.	1	600-26876-2		Model V20 - V23 ³	1	236-13891-2
	K7=piston Ø7 mm, assy.	1	600-26877-2		Model H	1	236-13857-1
	C7=piston Ø7 mm, assy.				Model M... ¹	1	236-13870-3
	for chisel paste	1	600-28750-1	31	Sealing plug, M33x2	1	233-13124-9
	KR=Pump element, adjustable	1	655-26178-1	31.1	O-ring ø31x2	1	219-14138-2
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	31.2	Sealing plug with O-ring	1	544-32851-1
19	Check valve Ø5 mm, assy.	1	504-36071-8	32	Closure plug M22x1.5x12	2	303-19285-1
	Check valve Ø6 mm, assy.	1	504-36071-4	33	Appliance plug 1 with cable ¹	1	664-36917-9
	Check valve Ø7 mm, assy.	1	504-36071-9	33.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
20	Pressure relief valve ⁴			34	Socket 1 (black) ¹ with		
	SVTE - 350 - 1/4 - D 6	1	624-28894-1		- flat packing and 10 m cable	1	664-36078-7
					- flat packing and 10 m cable,		
					for ADR-pump	1	664-36862-1
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88 only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

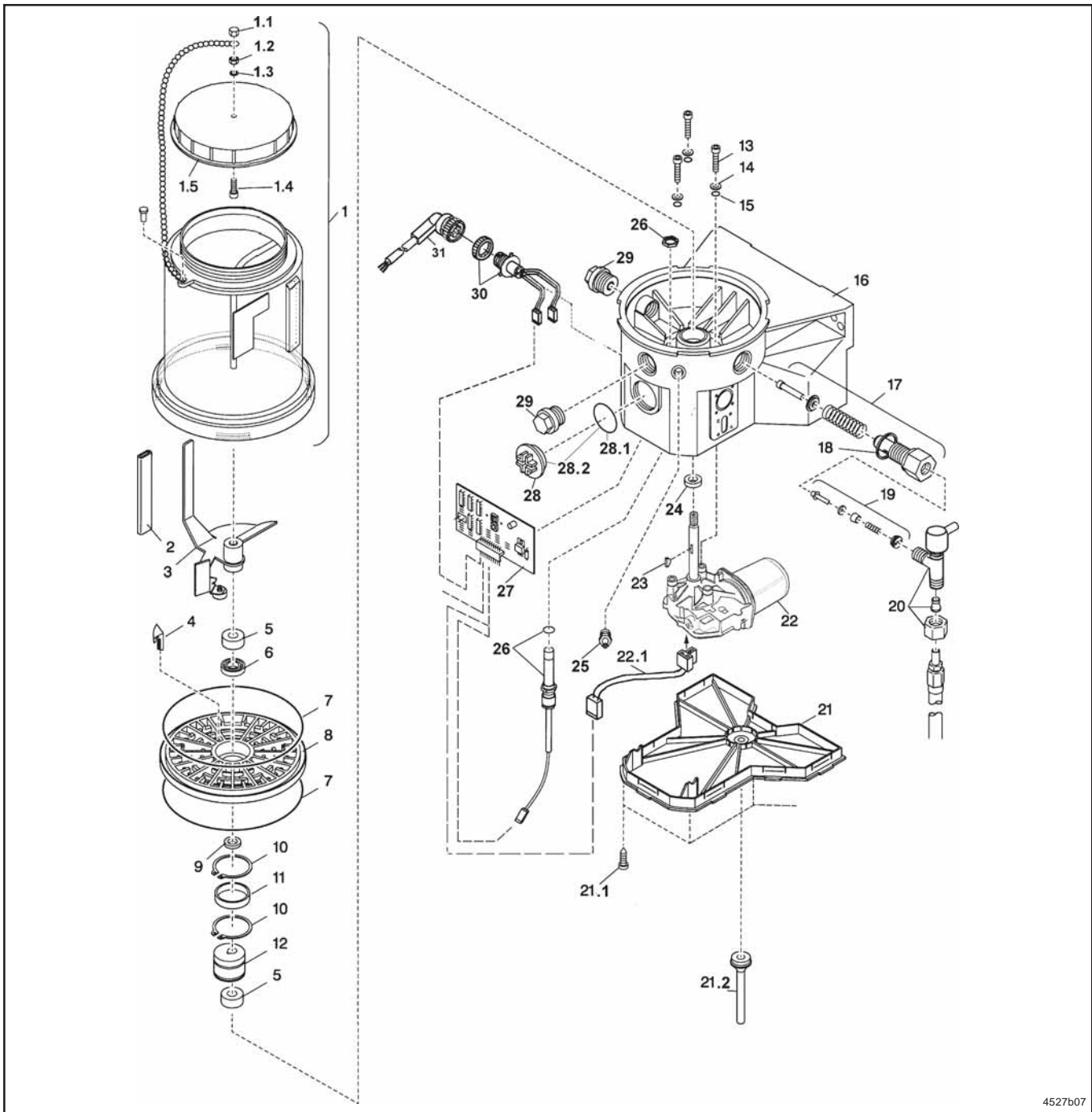
⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

2-l reservoir for grease

with low-level control
 P.c.b. versions V10 - V13, V20 - V23
 connection type 1A7.16



4527b07

Fig. 10 - Explosion view for P 203 -2XLBO-.K.-12/24-1A7.16-V...

Parts List acc. to Fig. 10

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2 XLBO	1	544-32027-1	21	Housing cover	1	444-24667-1
1.1	Acorn nut M4 C	1	207-12247-5		Housing cover, assy. since 1996	1	544-32217-1
1.2	Hexagonal nut M4 C	1	207-12135-2	21.1	Screw f. KF, 3x25	10	206-13796-7
1.3	Washer A 4.3 C	1	209-12146-2	21.2	Drain hose	1	444-24310-1
1.4	Hexagonal head screw M4x14 C	1	201-12051-4	22	Motor ^{1,4} with pos. 7, 13, 15, 22.1, 24		
1.5	Reservoir lid	1	221-12488-5		12 VDC	1	544-36913-6
2	Hose 12.5 cm	1	111-35089-2		24 VDC	1	544-36913-7
3	Stirring paddle, assy.	1	544-31947-1		24 VDC for VAC connection ¹	1	544-36913-8
4	Inner ring	2	444-24168-1	22.1	Motor connection	1	664-34195-2
5	Grooved ball bearing D 10/26x8	1	250-14009-7	23	Woodruff key 3x5	1	214-13123-1
6	Control jam	1	444-24212-1	24	Rotary shaft seal BA 10x22x7	1	220-12231-3
7	O-ring Ø142x4	2	219-13730-7	25	Hydraulic lube fitting AR 1/4 Z	1	251-14045-9
8	Intermediate bottom	1	444-24167-1	26	Magnetic switch for low-level control	1	234-13162-4
9	Shim 10x16x0.5	1	209-13047-5	27	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
10	Snap ring SW 32	2	211-14100-1		Model V10 - V13	1	236-13891-1
11	Pressure ring Ø33x37x13	1	444-24439-1		Model V20 - V23 ²	1	236-13891-2
12	Eccentric	1	444-24170-2		Model H	1	236-13857-1
13	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8		Model M... ¹	1	236-13870-3
14	Washer	3	444-24169-1	28	Sealing plug, M33x2	1	233-13124-9
15	O-ring Ø6x2	3	219-13084-2	28.1	O-ring ø31x2	1	219-14138-2
16	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	28.2	Sealing plug with O-ring	1	544-32851-1
17	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. C7=piston Ø7 mm, assy. for chisel paste KR=Pump element, adjustable	1 1 1 1 1	544-32191-1 600-26875-2 600-26876-2 600-26877-2 600-28750-1 655-26178-1	29	Closure plug M22x1.5x12	2	303-19285-1
18	Sealing ring Ø22.2x27x1.5	1	306-17813-1	30	Bayonet plug 1 with cable ¹ , 7/6-pole	1	664-34167-3
19	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1 1 1	504-36071-8 504-36071-4 504-36071-9	31	Bayonet cable, 7/6-core	1	664-34167-5
20	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1		Power supply board 230 VAC ¹ Arrow: direction of rotation Lincoln-Logo sticker Jumper for control p.c.b.	1 1 1 1	544-36961-4 810-55106-1 810-55087-1 236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

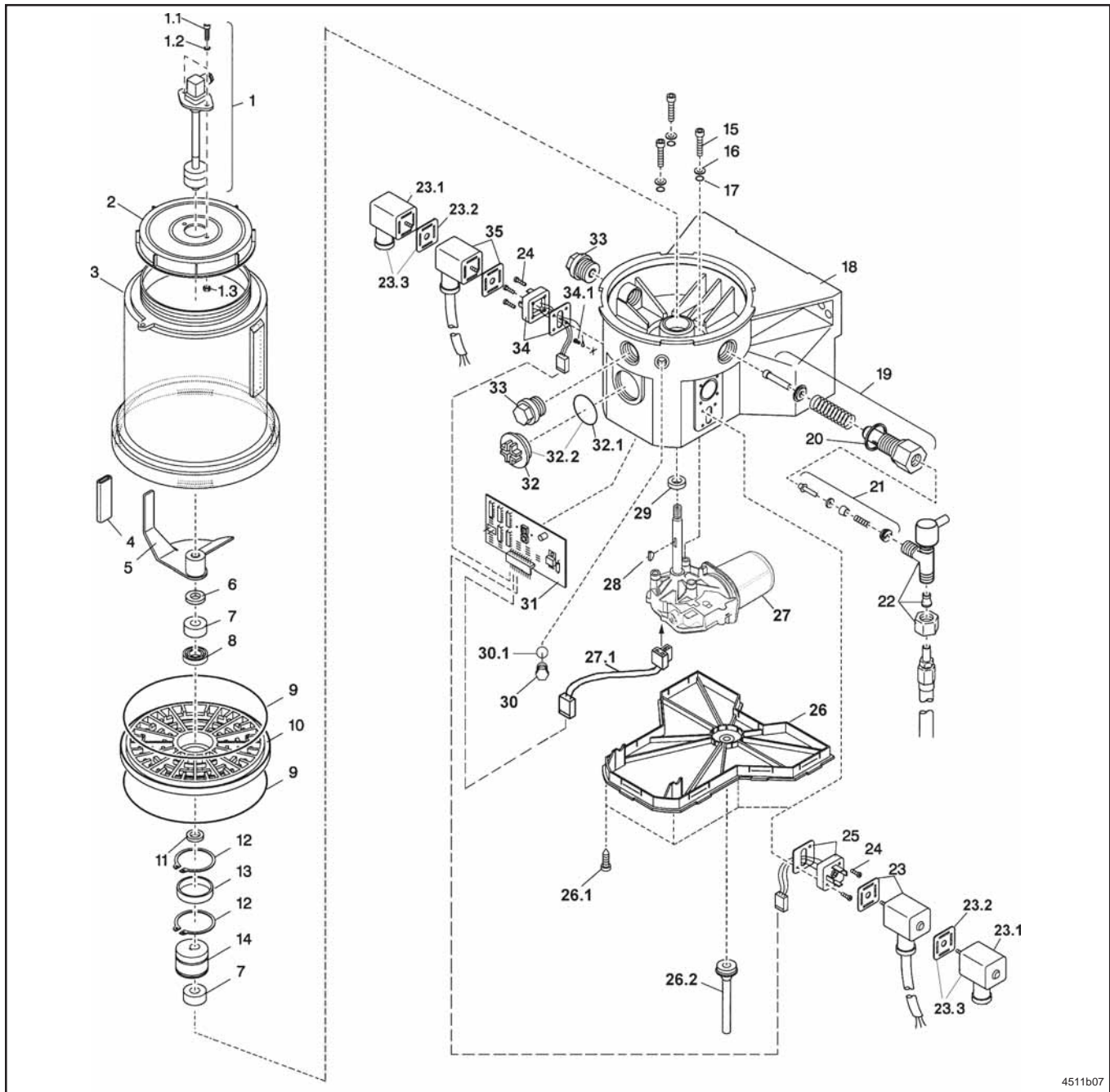
Subject to modifications

2-l reservoir for oil

with low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1A1.01/10, 2A1.01/10



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Fig. 11- Explosion view for P 203 -2YLBO-.K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 11

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Low-level control (magnetic floating switch)	1	444-24284-1	23	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9
1.1	Hexagon socket head screw M6x20 C	2	201-12018-5	23.1	Socket 1/2, (black) ^{1, 2}	2	236-13277-9
1.2	Washer A 6.4 C	2	209-13011-5	23.2	Flat packing	2	236-13294-3
1.3	Hexagon nut M6 C	2	207-12135-5	23.3	Socket with flat packing ^{1, 2}	2	544-32850-1
2	Reservoir lid	1	444-24285-1	24	Screw BZ 3x10 C	8	206-13796-6
3	Reservoir 2XNBO	1	544-31940-1	25	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
4	Hose 3 cm	1	111-35089-2	26	Housing cover	1	444-24667-1
5	Stirring paddle, assy.	1	544-31882-1		Housing cover, assy. since 1996	1	544-32217-1
6	Washer 8.4	1	209-13072-6	26.1	Screw f. KF, 3x25	10	206-13796-7
7	Inner ring	2	444-24168-1	26.2	Drain hose	1	444-24310-1
8	Grooved ball bearing D 10/26x8	1	250-14009-7	27	Motor ^{1, 5} with pos. 9, 15, 17, 27.1, 29		
9	O-ring Ø142x4	2	219-13730-7		12 VDC	1	544-36913-6
10	Intermediate bottom	1	444-24167-1		24 VDC	1	544-36913-7
11	Shim 10x16x1.2	1	209-13047-5		24 VDC for VAC connection ¹	1	544-36913-8
12	Snap ring SW 32	2	211-14100-1	27.1	Motor connection	1	664-34195-2
13	Pressure ring Ø33x37x13	1	444-24439-1	28	Woodruff key 3x5	1	214-13123-1
14	Eccentric	1	444-24170-2	29	Rotary shaft seal BA 10x22x7	1	220-12231-3
15	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8	30	Closure plug R1/4x82	1	303-17513-1
16	Washer	3	444-24169-1	30.1	O-ring Ø11x2	1	219-12223-4
17	O-ring Ø6x2	3	219-13084-2	31	Control p.c.b. 12/24 VDC ¹ for industrial application		
18	Housing	1	444-24666-1		Model V10 - V13	1	236-13891-1
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1		Model V20 - V23 ³	1	236-13891-2
19	Pump element with				Model M... ¹	1	236-13870-3
	K5=piston Ø5 mm, assy.	1	600-26875-2	32	Sealing plug, M33x2	1	233-13124-9
	K6=piston Ø6 mm, assy.	1	600-26876-2	32.1	O-ring ø31x2	1	219-14138-2
	K7=piston Ø7 mm, assy.	1	600-26877-2	32.2	Sealing plug with O-ring	1	544-32851-1
	KR=Pump element, adjustable	1	655-26178-1	33	Closure plug M22x1.5x12	2	303-19285-1
20	Sealing ring Ø22.2x27x1.5	1	306-17813-1	34	Appliance plug 1 with cable ¹	1	664-36917-9
21	Check valve Ø5 mm, assy.	1	504-36071-8	35.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	Check valve Ø6 mm, assy.	1	504-36071-4	35	Socket 1 (black) ¹ with flat packing and 10 m cable	1	664-36078-7
	Check valve Ø7 mm, assy.	1	504-36071-9				
22	Pressure relief valve ⁴				Power supply board 230 VAC ¹	1	544-36961-4
	SVTE - 350 - 1/4 - D 6	1	624-28894-1		Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Note: Connection 2A1. 01/10 (pos. 23, 24, 25) only for external triggering of additional lubrication cycle

Subject to modifications

2-l reservoir for oil

with low-level control
P.c.b. versions V10 - V13, V20 - V23
connection type 1A7.16

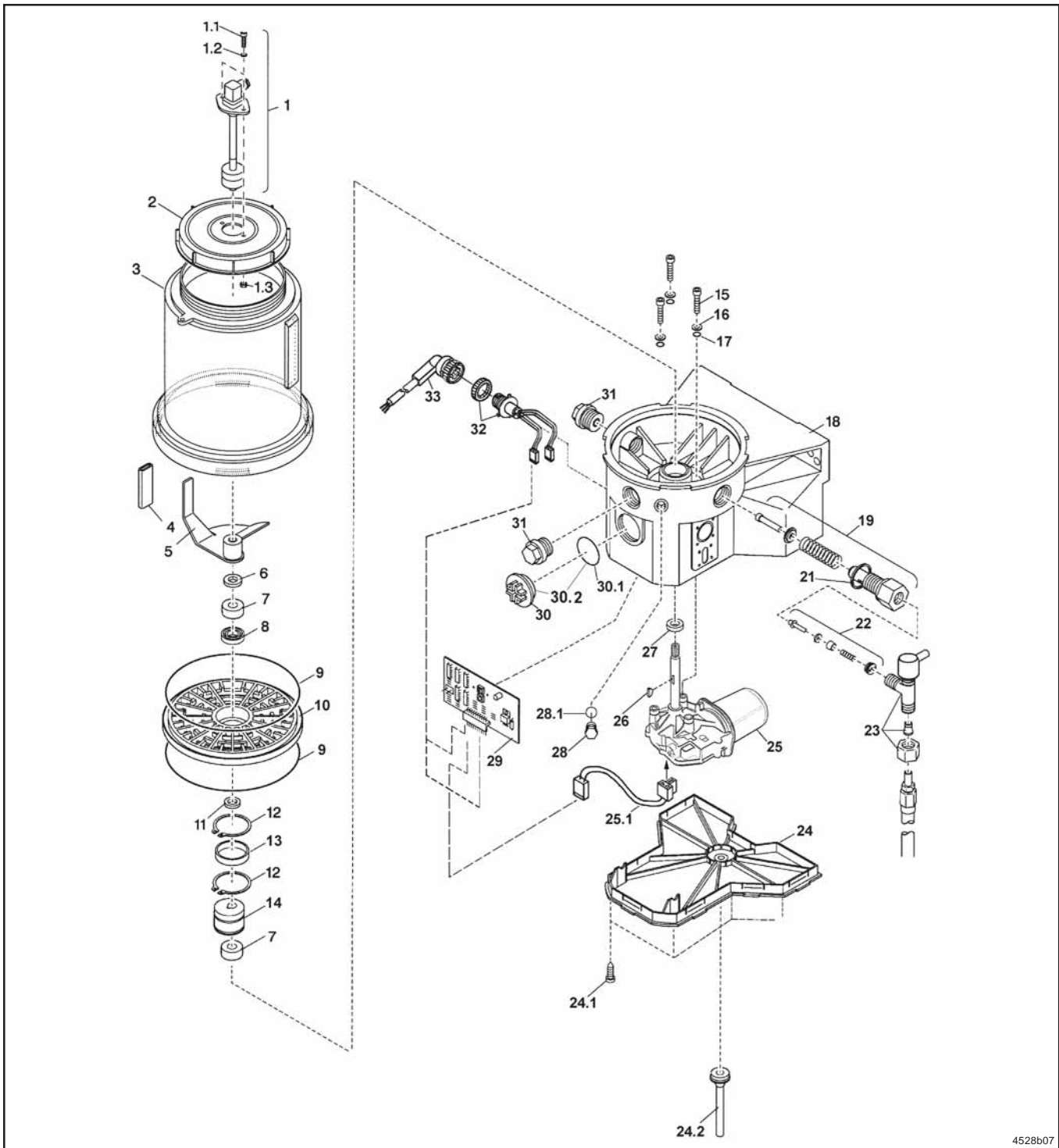


Fig. 12- Explosion view for P 203 -2YLBO-.K.-12/24-1A7.16-V...

4528b07

Subject to modifications

Parts List acc. to Fig. 12

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Low-level control (magnetic floating switch)	1	444-24284-1	23	Housing cover	1	444-24667-1
1.1	Hexagon socket head screw M 6x20 C	2	201-12018-5		Housing cover, assy. since 1996	1	544-32217-1
1.2	Washer A 6.4 C	2	209-13011-5	24.1	Screw f. KF, 3x25	10	206-13796-7
1.3	Hexagon nut M6 C	2	207-12135-5	24.2	Drain hose	1	444-24310-1
2	Reservoir lid	1	444-24285-1	25	Motor ^{1, 4}		
3	Reservoir 2XNBO	1	544-31940-1		with pos. 9, 15, 17, 25.1,27		
4	Hose 3 cm	1	111-35089-2		12 VDC	1	544-36913-6
5	Stirring paddle, assy.	1	544-31882-1		24 VDC	1	544-36913-7
6	Washer 8.4	1	209-13072-6		24 VDC for VAC connection ¹	1	544-36913-8
7	Inner ring	2	444-24168-1	25.1	Motor connection	1	664-34195-2
8	Grooved ball bearing D 10/26x8	1	250-14009-7	26	Woodruff key 3x5	1	214-13123-1
9	O-ring Ø142x4	2	219-13730-7	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
10	Intermediate bottom	1	444-24167-1	28	Closure plug R1/4x82	1	303-17513-1
11	Shim 10x16x1.2	1	209-13047-5	28.1	O-ring Ø11x2	1	219-12223-4
12	Snap ring SW 32	2	211-14100-1	29	Control p.c.b. 12/24 VDC ¹ for industrial application		
13	Pressure ring Ø33x37x13	1	444-24439-1		Model V10 - V13	1	236-13891-1
14	Eccentric	1	444-24170-2		Model V20 - V23 ²	1	236-13891-2
15	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8		Model M... ¹	1	236-13870-3
16	Washer	3	444-24169-1	30	Sealing plug, M33x2	1	233-13124-9
17	O-ring Ø6x2	3	219-13084-2	30.1	O-ring ø31x2	1	219-14138-2
18	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	30.2	Sealing plug with O-ring	1	544-32851-1
19	Pump element with K5=piston Ø5 mm, assy.	1	544-32191-1	31	Closure plug M22x1.5x12	2	303-19285-1
	K6=piston Ø6 mm, assy.	1		32	Bayonet plug 1 with cable ¹ , 7/6-core	1	664-34167-3
	K7=piston Ø7 mm, assy.	1		33	Bayonet cable, 7/6-core	1	664-34167-5
	KR=Pump element, adjustable	1			Power supply board 230 VAC ¹	1	544-36961-4
20	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction of rotation	1	810-55106-1
21	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
22	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

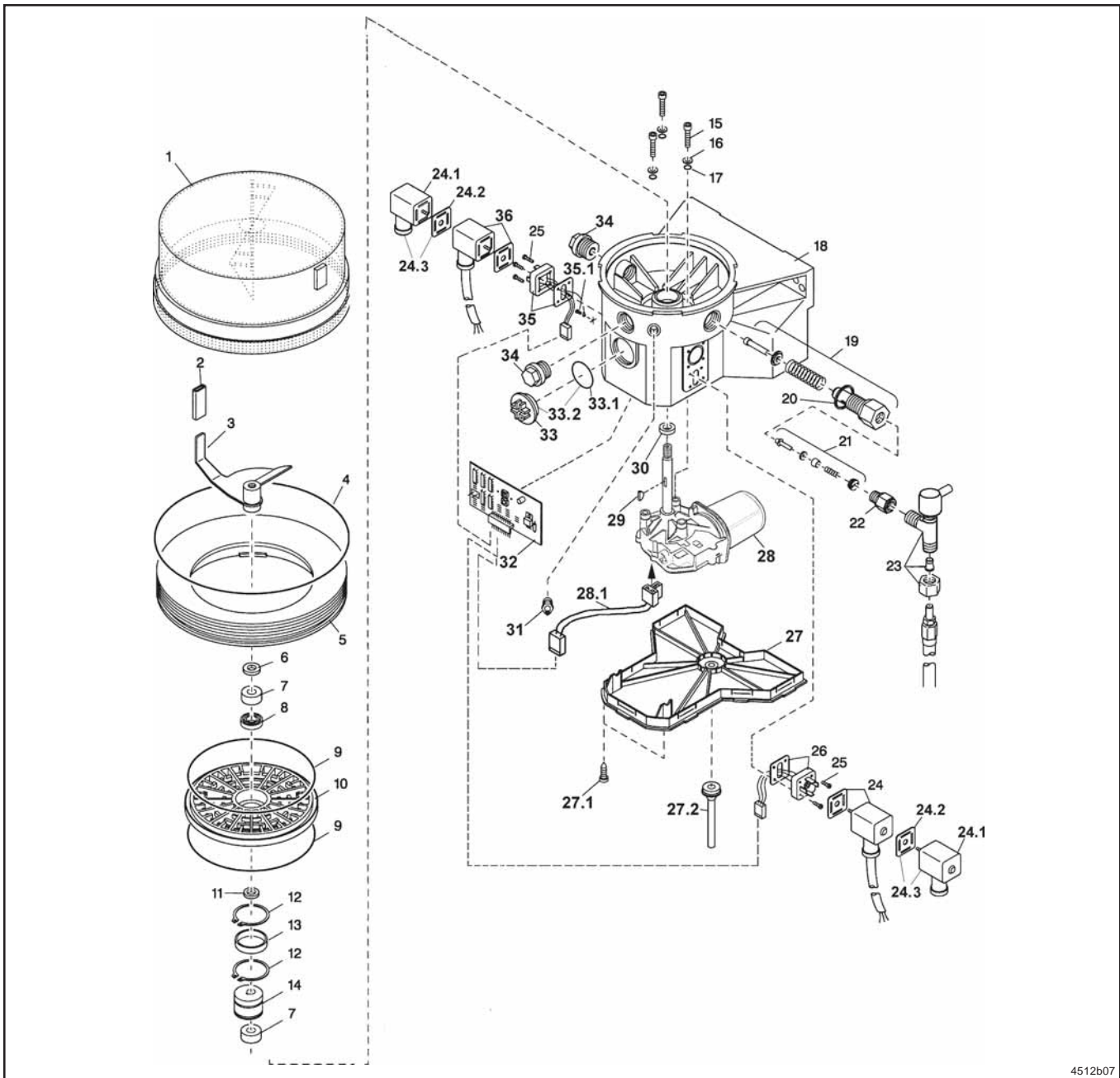
Subject to modifications

2-l flat-type reservoir for grease

without low-level control

P.c.b. versions V10 - V13, V20 - V23, V10-V13 ADR, H ADR

connection types 1A1.01/10, 2A1.01/10



4512b07

Fig. 13 - Explosion view for P 203 -2XNFL-K.-12/24-1/2A1.01/10-V..., V... ADR, H ADR

Parts List acc. to Fig. 13

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2XNFL	1	544-31997-1	27	Housing cover	1	444-24667-1
2	Hose 3 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
3	Stirring paddle, assy.	1	544-31929-1	27.1	Screw f. KF, 3x25	10	206-13796-7
4	O-ring, Ø210x5	1	219-13730-9	27.2	Drain hose	1	444-24310-1
5	Adapter ring	1	444-24235-1	28	Motor ^{1,5}		
6	Washer 8.4	1	209-13072-6		with pos. 9, 15, 17, 28.1, 30		
7	Inner ring	2	444-24168-1		12 VDC	1	544-36913-6
8	Grooved ball bearing D 10/26x8	1	250-14009-7		24 VDC	1	544-36913-7
9	O-ring Ø142x4	2	219-13730-7		24 VDC for VAC connection ¹	1	544-36913-8
10	Intermediate bottom	1	444-24167-1	28.1	Motor connection	1	664-34195-2
11	Shim 10x16x0.5	1	209-13047-5	29	Woodruff key 3x5	1	214-13123-1
12	Snap ring SW 32	2	211-14100-1	30	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Pressure ring Ø33x37x13	1	444-24439-1	31	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Eccentric	1	444-24170-2	32	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
15	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8		Model V10 - V13	1	236-13891-1
16	Washer	3	444-24169-1		Model V20 - V23 ³	1	236-13891-2
17	O-ring Ø6x2	3	219-13084-2		Model H	1	236-13857-1
18	Housing	1	444-24666-1		Model M... ¹	1	236-13870-3
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	33	Sealing plug, M33x2	1	233-13124-9
19	Pump element with			33.1	O-ring ø31x2	1	219-14138-2
	K5=piston Ø5 mm, assy.	1	600-26875-2	33.2	Sealing plug with O-ring	1	544-32851-1
	K6=piston Ø6 mm, assy.	1	600-26876-2	34	Closure plug M22x1.5x12	2	303-19285-1
	K7=piston Ø7 mm, assy.	1	600-26877-2	35	Appliance plug 1 with cable ¹	1	664-36917-9
	KR=Pump element, adjustable	1	655-26178-1	35.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
20	Sealing ring 22.2x27x1.5	1	306-17813-1	36	Socket 1 (black) ¹ with		
21	Check valve Ø5 mm, assy.	1	504-36071-8		-flat packing and 10 m cable	1	664-36078-7
	Check valve Ø6 mm, assy.	1	504-36071-4		-flat packing and 10 m cable, for ADR-pump	1	664-36862-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Power supply board 230 VAC ¹	1	544-36961-4
22	Nipple S 2520-1/4-1/4-25	1	226-14105-5		Arrow: direction of rotation	1	810-55106-1
23	Pressure relief valve ⁴				Lincoln-Logo sticker	1	810-55087-1
	SVTE - 350 - 1/4 - D 6	1	624-28894-1		Jumper for control p.c.b.	1	236-13898-1
24	Socket 2 (grey) ^{1, 2} with						
	- flat packing and 10 m cable	1	664-36078-9				
	- flat packing and 10 m cable, for ADR-pump	1	664-36862-2				
24.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9				
24.2	Flat packing	2	236-13294-3				
24.3	Socket with flat packing ^{1,2}	2	544-32850-1				
25	Screw BZ 3x10 C	8	206-13796-6				
26	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

2-l flat-type reservoir for grease

without low-level control

P.c.b. versions V10 - V13, V20 - V23, V10-V13 ADR, H ADR

connection types 1A5.14, 1A7.16, 1A5.17 (ADR)

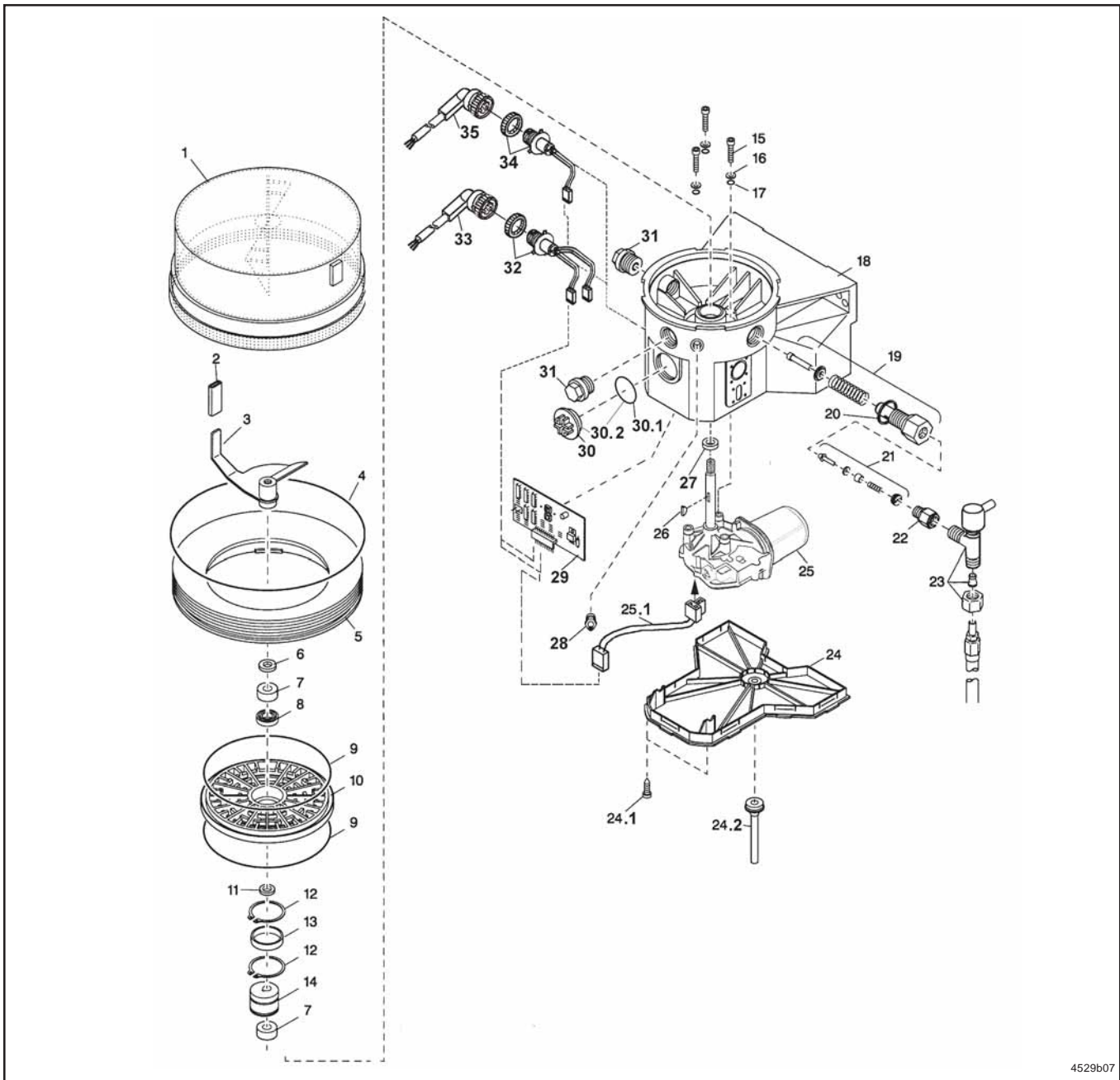


Fig. 14 - Explosion view for P 203 -2XNFL-.K.-12/24-1A5.14/1A7.16/1A5.17--V..., V...ADR, H ADR

Parts List acc. to Fig. 14

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 2XNFL	1	544-31997-1	24	Housing cover	1	444-24667-1
2	Hose 3 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
3	Stirring paddle, assy.	1	544-31929-1	24.1	Screw f. KF, 3x25	10	206-13796-7
4	O-ring, Ø210x5	1	219-13730-9	24.2	Drain hose	1	444-24310-1
5	Adapter ring	1	444-24235-1	25	Motor ^{1,4}		
6	Washer 8.4	1	209-13072-6		with pos. 9, 15, 17, 25.1, 27		
7	Inner ring	2	444-24168-1		12 VDC	1	544-36913-6
8	Grooved ball bearing D 10/26x8	1	250-14009-7		24 VDC	1	544-36913-7
9	O-ring Ø142x4	2	219-13730-7		24 VDC for VAC connection ¹	1	544-36913-8
10	Intermediate bottom	1	444-24167-1	25.1	Motor connection	1	664-34195-2
11	Shim 10x16x0.5	1	209-13047-5	26	Woodruff key 3x5	1	214-13123-1
12	Snap ring SW 32	2	211-14100-1	27	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Pressure ring Ø33x37x13	1	444-24439-1	28	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Eccentric	1	444-24170-2	29	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
15	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8		Model V10 - V13	1	236-13891-1
16	Washer	3	444-24169-1		Model V20 - V23 ²	1	236-13891-2
17	O-ring Ø6x2	3	219-13084-2		Model H	1	236-13857-1
18	Housing	1	444-24666-1		Model M... ¹	1	236-13870-3
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	30	Sealing plug, M33x2	1	233-13124-9
19	Pump element with K5=piston Ø5 mm, assy.	1	600-26875-2	30.1	O-ring ø31x2	1	219-14138-2
	K6=piston Ø6 mm, assy.	1	600-26876-2	30.2	Sealing plug with O-ring	1	544-32851-1
	K7=piston Ø7 mm, assy.	1	600-26877-2	31	Closure plug M22x1.5x12	2	303-19285-1
	KR=Pump element, adjustable	1	655-26178-1	32	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
20	Sealing ring 22.2x27x1.5	1	306-17813-1	33	Bayonet cable, 7/6-core	1	664-34167-5
21	Check valve Ø5 mm, assy.	1	504-36071-8	34	Bayonet plug 1 with cable ¹ , 4/3-pole (1A5.14)	1	664-34041-5
	Check valve Ø6 mm, assy.	1	504-36071-4	35	Bayonet cable, 4/3-core	1	664-34167-6
	Check valve Ø7 mm, assy.	1	504-36071-9		Bayonet cable, 4/3-core ADR	1	664-34167-8
22	Nipple S 2520-1/4-1/4-25	1	226-14105-5		Power supply board 230 VAC ¹	1	544-36961-4
23	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1		Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l and 8-l reservoir for grease or oil

without low-level control
 without control p.c.b.
 connection type 1A1.01/10

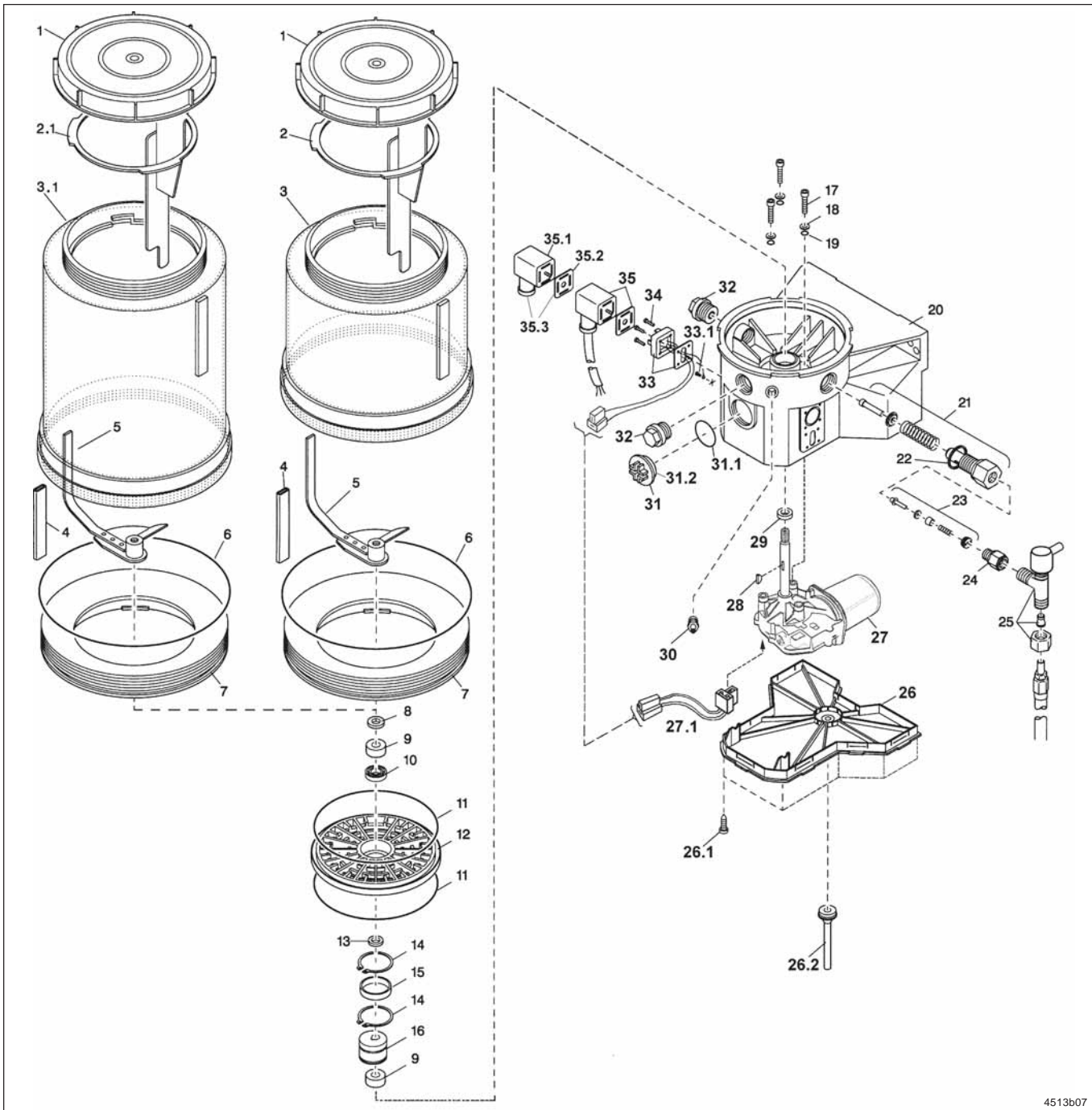


Fig. 15 - Explosion view for P 203 -4XNBO/8XNBO-.K.-12/24-1A1.01/10

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Parts List acc. to Fig. 15

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	25	Pressure relief valve ³		
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1		SVTE - 350 - 1/4 - D 6	1	624-28894-1
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	26	Housing cover	1	444-24667-1
3	Reservoir 4XNBO/4YNBO	1	544-31998-1		Housing cover, assy. since 1996	1	544-32217-1
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	26.1	Screw f. KF, 3x25	10	206-13796-7
4	Hose 10 cm	1	111-35089-2	26.2	Drain hose	1	444-24310-1
5	Stirring paddle, assy.	1	544-31954-1	27	Motor ^{1,3}		
6	O-ring, Ø210x5	1	219-13730-9		with pos. 11, 17, 19, 27.1, 29		
7	Adapter ring	1	444-24235-1		12 VDC	1	544-36913-3
8	Washer 8.4	1	209-13072-6		24 VDC	1	544-36913-4
9	Inner ring	2	444-24168-1		24 VDC for VAC connection ¹	1	544-36913-8
10	Grooved ball bearing D 10/26x8	1	250-14009-7	27.1	Adapter cable ⁴	1	664-34195-8
11	O-ring Ø142x4	2	219-13730-7	28	Woodruff key 3x5	1	214-13123-1
12	Intermediate bottom	1	444-24167-1	29	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Shim 10x16x0.5	1	209-13047-5	30	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Snap ring SW 32	2	211-14100-1	31	Sealing plug, M33x2 incl.	1	
15	Pressure ring Ø33x37x13	1	444-24439-1	31.1	O-ring ø31x2	1	544-32851-1
16	Eccentric	1	444-24170-2	32	Closure plug M22x1.5x12	2	303-19285-1
17	Hexagon socket head screw M6x25, self-tapping ³	3	206-13710-8	33	Appliance plug 1 with cable	1	664-34195-5
18	Washer	3	444-24169-1	33.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
19	O-ring Ø6x2	3	219-13084-2	34	Screw BZ 3x10 C	8	206-13796-6
20	Housing	1	444-24666-1	35	Socket 1 (black) ¹		
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1		with flat packing and 10 m cable,	1	664-36078-7
21	Pump element with			35.1	Socket 1 (black) ^{1,2}	1	236-13277-9
	K5=piston Ø5 mm, assy.	1	600-26875-2	35.2	Flat packing	1	236-13294-3
	K6=piston Ø6 mm, assy.	1	600-26876-2	35.3	Socket with flat packing ^{1,2}	2	544-32850-1
	K7=piston Ø7 mm, assy.	1	600-26877-2		Power supply board 230 VAC ¹	1	544-36961-4
	C7=piston Ø7 mm, assy.				Arrow: direction of rotation	1	810-55106-1
	for chisel paste	1	600-28750-1		Lincoln-Logo sticker	1	810-55087-1
	KR=Pump element, adjustable	1	655-26178-1				
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1				
23	Check valve Ø5 mm, assy.	1	504-36071-8				
	Check valve Ø6 mm, assy.	1	504-36071-4				
	Check valve Ø7 mm, assy.	1	504-36071-9				
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5				

¹ deviations of the shown connection type of pump Pumpe 203, see pages 80-88

² other pressure relief valves see Parts Catalog

³ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁴ part of the motor kit

Subject to modifications

4-l and 8-l reservoir for grease

with low-level control
without control p.c.b.
connection type 2A1.01/10

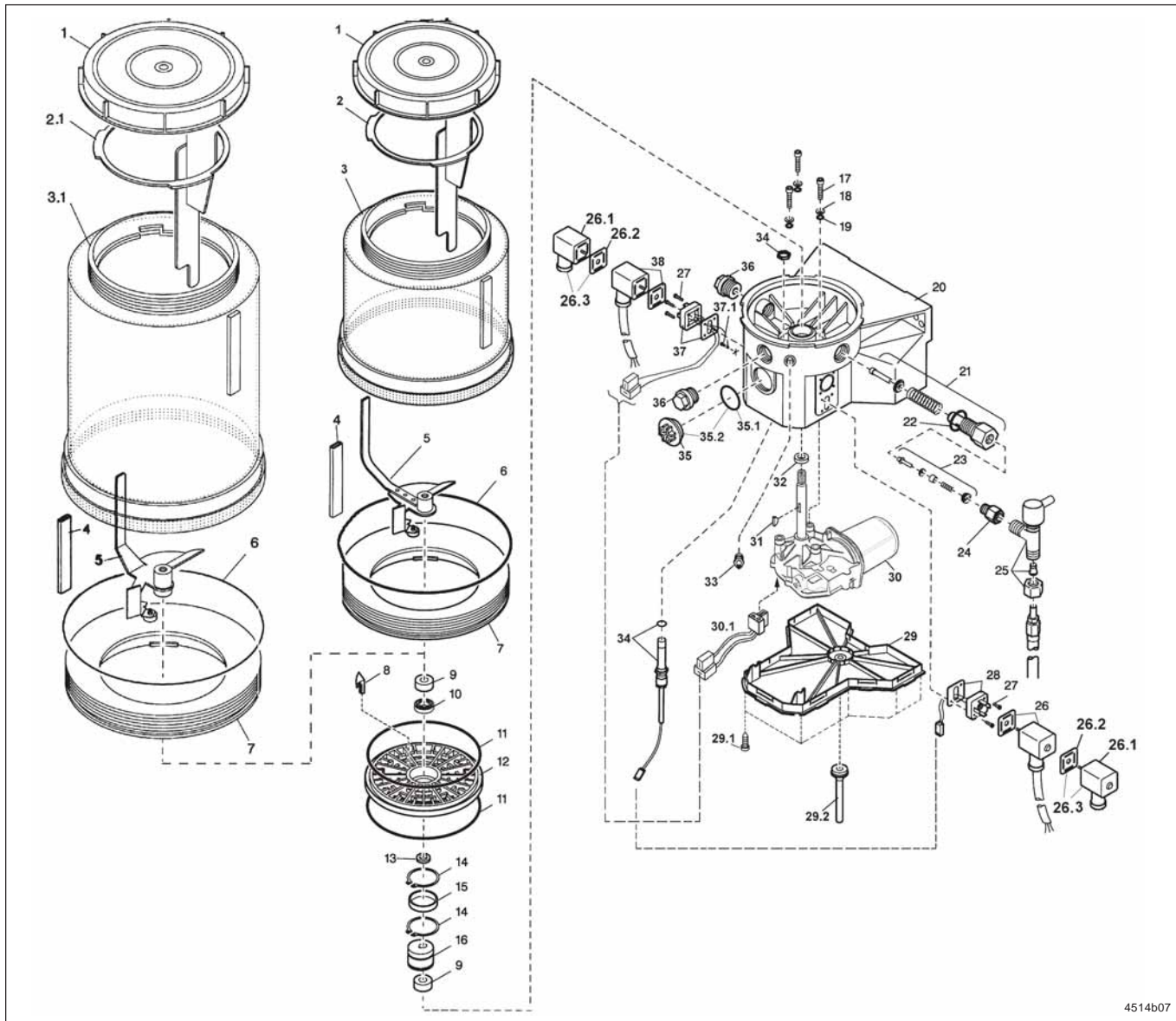


Fig. 16 - Explosion view for P 203 -4XLBO/8XLBO-.K.-12/24-2A1.01/10

Parts List acc. to Fig. 16

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	25	Pressure relief valve 2		
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1		SVTE - 350 - 1/4 - D 6	1	624-28894-1
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	26	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9
3	Reservoir 4XNBO/4YNBO	1	544-31998-1	26.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	26.2	Flat packing	2	236-13294-3
4	Hose 10 cm	1	111-35089-2	26.3	Socket with flat packing ^{1,2}	2	544-32850-1
5	Stirring paddle, assy.	1	544-31954-1	27	Screw BZ 3x10 C	8	206-13796-6
6	O-ring, Ø210x5	1	219-13730-9	28	Appliance plug 2 mit Kabel ^{1, 2}	1	664-36862-5
7	Adapter ring	1	444-24235-1	29	Housing cover	1	444-24667-1
8	Control cam	1	444-24212-1		Housing cover, assy. since 1996	1	544-32217-1
9	Inner ring	2	444-24168-1	29.1	Screw f. KF, 3x25	10	206-13796-7
10	Grooved ball bearing D 10/26x8	1	250-14009-7	29.2	Drain hose	1	444-24310-1
11	O-ring Ø142x4	2	219-13730-7	30	Motor ^{1,3}		
12	Intermediate bottom	1	444-24167-1		with pos. 11, 17, 19, 30.1, 32		
13	Shim 10x16x0.5	1	209-13047-5		12 VDC	1	544-36913-3
14	Snap ring SW 32	2	211-14100-1		24 VDC	1	544-36913-4
15	Pressure ring Ø33x37x13	1	444-24439-1		24 VDC for VAC connection ¹	1	544-36913-8
16	Eccentric	1	444-24170-2	30.1	Adapter cable ⁴	1	664-34195-8
17	Hexagon socket head screw M6x25, self-tapping ³	3	206-13710-8	31	Woodruff key 3x5	1	214-13123-1
18	Washer	3	444-24169-1	32	Rotary shaft seal BA 10x22x7	1	220-12231-3
19	O-ring Ø6x2	3	219-13084-2	33	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
20	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	34	Magnetic switch for low-level control	1	234-13162-4
21	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. C7=piston Ø7 mm, assy. for chisel paste KR=Pump element, adjustable	1	544-32191-1	35	Sealing plug, M33x2	1	233-13124-9
				35.1	O-ring ø31x2	1	219-14138-2
				35.2	Sealing plug with O-ring	1	544-32851-1
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1	36	Closure plug M22x1.5x12	2	303-19285-1
23	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1	504-36071-8	37	Appliance plug 1 with cable	1	664-34195-5
				37.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5	38	Socket 1 (black) ¹ with flat packing and 10 m cable	1	664-36078-7
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1

¹ deviations of shown connection type of pump Pumpe 203, see pages 80-88

² other pressure relief valves see Parts Catalog

³ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁴ part of the motor kit

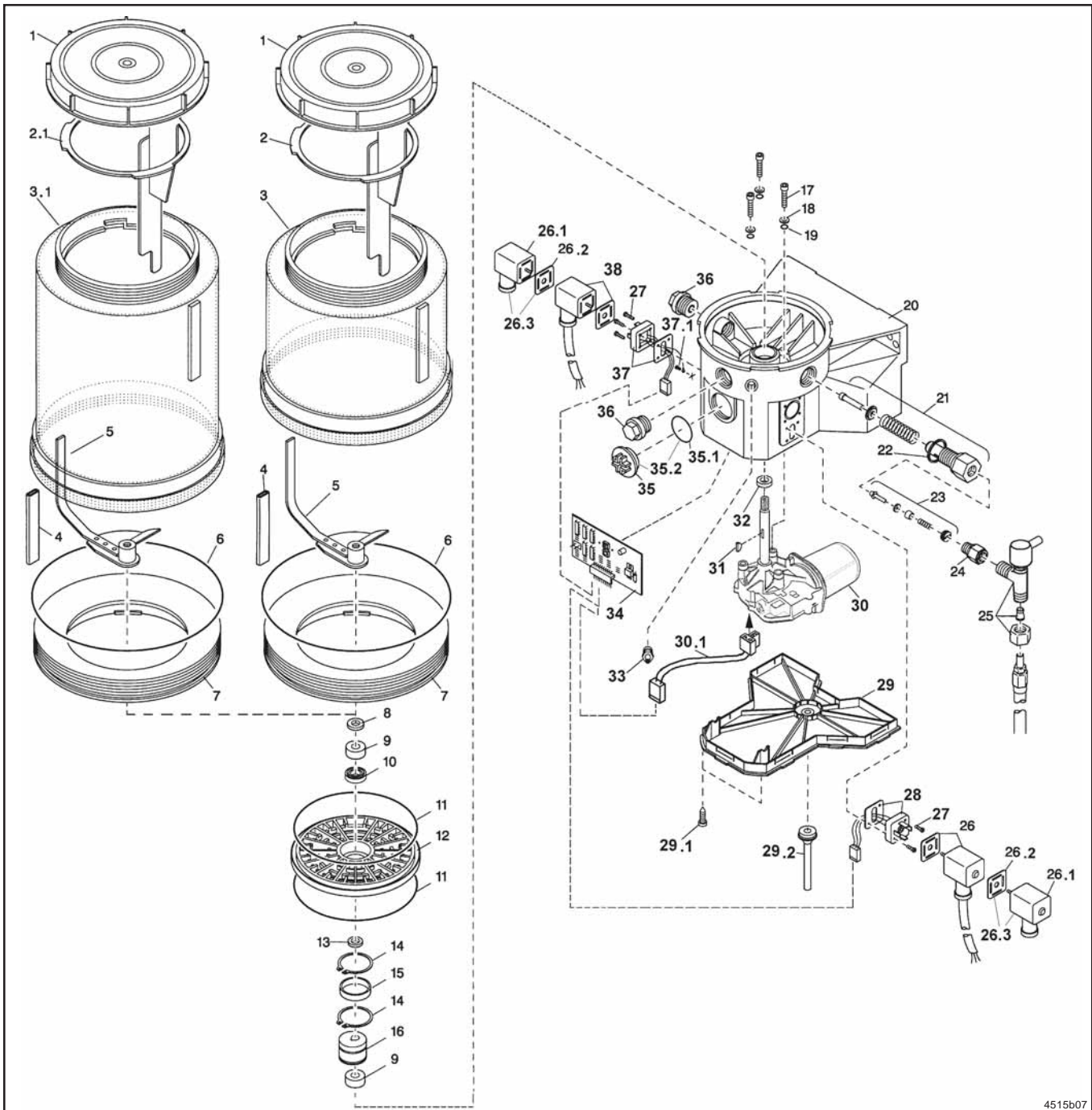
Subject to modifications

4-l and 8-l reservoir for grease or oil

without low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1 A1.01/10, 2A1.01/10



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Fig. 17 - Explosion view for P 203 -4XNBO/8XNBO/4YNBO/8YNBO-.K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 17

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	28	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
2	Fixed paddle, assy.4XNBO/4YNBO	1	544-31948-1	28.1	Socket1/2 (black) ^{1, 2}	2	236-13277-9
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70490-1	28.2	Flat packing	2	236-13294-3
3	Reservoir 4XNBO/4YNBO	1	444-70491-1	28.3	Socket with flat packing ^{1, 2}	2	544-32850-1
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	29	Housing cover	1	444-24667-1
4	Hose 10 cm	1	111-35089-2		Housing cover, assy. since 1996	1	544-32217-1
5	Stirring paddle, assy.	1	544-31954-1	29.1	Screw f. KF, 3x25	10	206-13796-7
6	O-ring, Ø210x5	1	219-13730-9	29.2	Drain hose	1	444-24310-1
7	Adapter ring	1	444-24235-1	30	Motor ^{1, 6}		
8	Washer 8.4	1	209-13072-6		with pos. 11, 17, 19, 30.1, 32		
9	Inner ring	2	444-24168-1		12 VDC	1	544-36913-6
10	Grooved ball bearing D 10/26x8	1	250-14009-7		24 VDC	1	544-36913-7
11	O-ring Ø142x4	2	219-13730-7		24 VDC for VAC connection ¹	1	544-36913-8
12	Intermediate bottom	1	444-24167-1	30.1	Motor connection	1	664-34195-2
13	Shim 10x16x0.5	1	209-13047-5	31	Woodruff key 3x5	1	214-13123-1
14	Snap ring SW 32	2	211-14100-1	32	Rotary shaft seal BA 10x22x7	1	220-12231-3
15	Pressure ring Ø33x37x13	1	444-24439-1	33	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
16	Eccentric	1	444-24170-2	34	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
17	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8		Model V10 - V13	1	236-13891-1
18	Washer	3	444-24169-1		Model V20 - V23 ³	1	236-13891-2
19	O-ring Ø6x2	3	219-13084-2		Model M... ¹	1	236-13870-3
20	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	35	Sealing plug, M33x2	1	233-13124-9
21	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. KR=Pump element, adjustable	1	544-32191-1	35.1	O-ring ø31x2	1	219-14138-2
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1	35.2	Sealing plug with O-ring	1	544-32851-1
23	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1	504-36071-8	36	Closure plug M22x1.5x12	2	303-19285-1
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5	37	Appliance plug 1 with cable ¹	1	664-36917-9
25	Pressure relief valve ⁴ SVTE - 350 - 1/4 - D 6	1	624-28894-1	37.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
26	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9	38	Socket 1 (black) ¹ with flat packing and 10 m cable	1	664-36078-7
27	Screw BZ 3x10 C	8	206-13796-6		Power supply board 230 VAC ¹ Arrow: direction of rotation Lincoln-Logo sticker Jumper for control p.c.b.	1	544-36961-4 810-55106-1 810-55087-1 236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

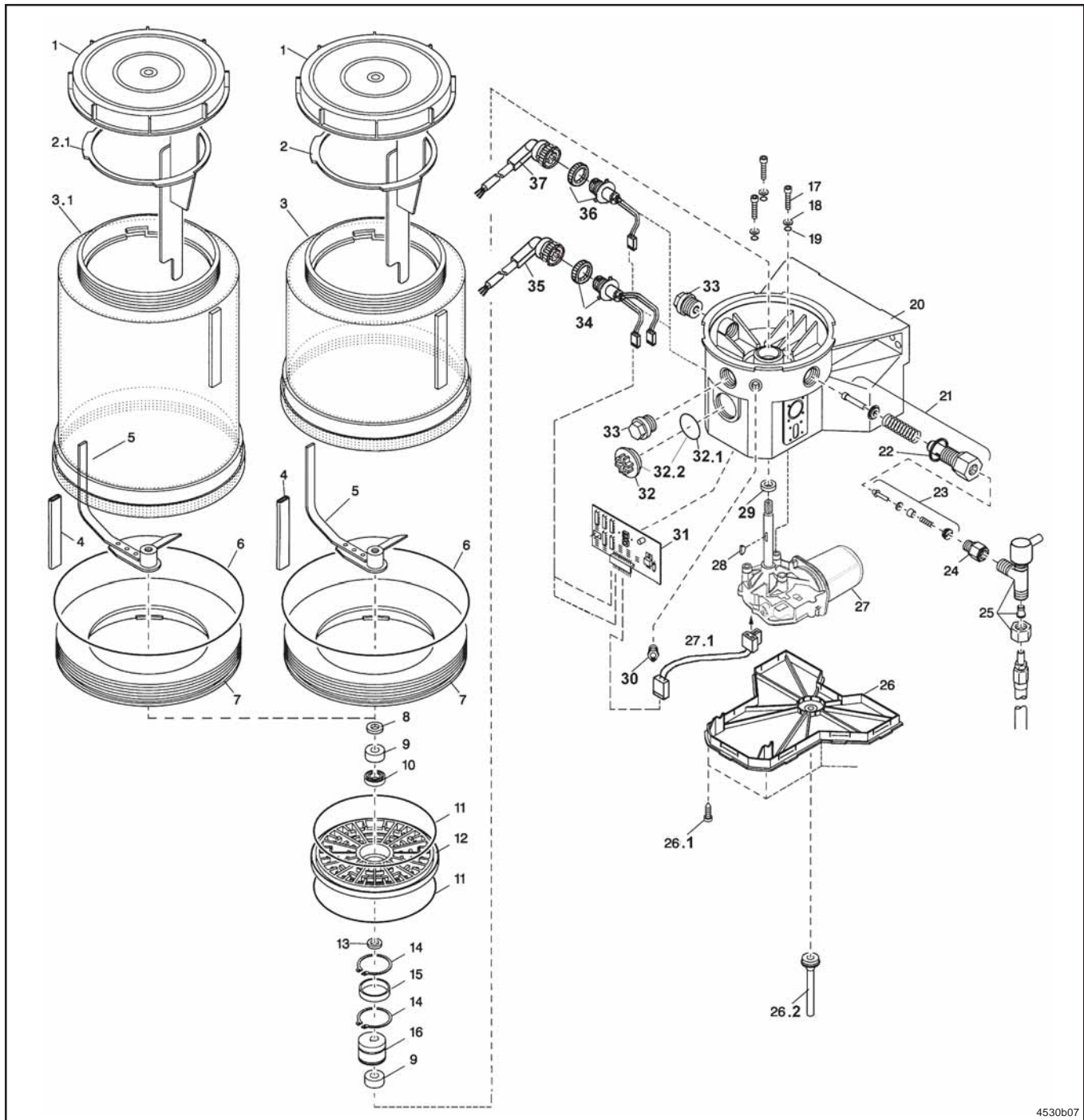
Subject to modifications

4-l and 8-l reservoir for grease or oil

without low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1 A5.14, 1A7.16



4530b07

Fig. 18 - Explosion view for P 203 -4XNBO/8XNBO/4YNBO/8YNBO-K.-12/24-1A5.14/1A7.16-V...

Parts List acc. to Fig. 18

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	25	Housing cover	1	444-24667-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	544-31948-1		Housing cover, assy. since 1996	1	544-32217-1
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70490-1	26.1	Screw f. KF, 3x25	10	206-13796-7
3	Reservoir 4XNBO/4YNBO	1	444-70491-1	26.2	Drain hose	1	444-24310-1
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	27	Motor ^{1, 4}		
4	Hose 10 cm	1	111-35089-2		with pos. 11, 17, 19, 27.1, 29		
5	Stirring paddle, assy.	1	544-31954-1		12 VDC	1	544-36913-6
6	O-ring, Ø210x5	1	219-13730-9		24 VDC	1	544-36913-7
7	Adapter ring	1	444-24235-1		24 VDC for VAC connection ¹	1	544-36913-8
8	Washer 8.4	1	209-13072-6	27.1	Motor connection	1	664-34195-2
9	Inner ring	2	444-24168-1	28	Woodruff key 3x5	1	214-13123-1
10	Grooved ball bearing D 10/26x8	1	250-14009-7	29	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	O-ring Ø142x4	2	219-13730-7	30	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Intermediate bottom	1	444-24167-1	31	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
13	Shim 10x16x0.5	1	209-13047-5		Model V10 - V13	1	236-13891-1
14	Snap ring SW 32	2	211-14100-1		Model V20 - V23 ²	1	236-13891-2
15	Pressure ring Ø33x37x13	1	444-24439-1		Model M... ¹	1	236-13870-3
16	Eccentric	1	444-24170-2	32	Sealing plug, M33x2	1	233-13124-9
17	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	32.1	O-ring ø31x2	1	219-14138-2
18	Washer	3	444-24169-1	32.2	Sealing plug with O-ring	1	544-32851-1
19	O-ring Ø6x2	3	219-13084-2	33	Closure plug M22x1.5x12	2	303-19285-1
20	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	34	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
21	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. KR=Pump element, adjustable	1	544-32191-1	35	Bayonet cable, 7/6-core	1	664-34167-5
				36	Bayonet plug 1 with cable ¹ , 4/3-pole(1A5.14)	1	664-34041-5
				37	Bayonet cable, 4/3-core	1	664-34167-6
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Power supply board 230 VAC ¹	1	544-36961-4
23	Check valve Ø5 mm, assy.	1	504-36071-8		Arrow: direction of rotation	1	810-55106-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Jumper for control p.c.b.	1	236-13898-1
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
25	Pressure relief valve ³ SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit

Subject to modifications

4-l and 8-l reservoir for grease

with low-level control
 P.c.b. versions V10 - V13, V20 - V23
 connection type 2A1.01/10

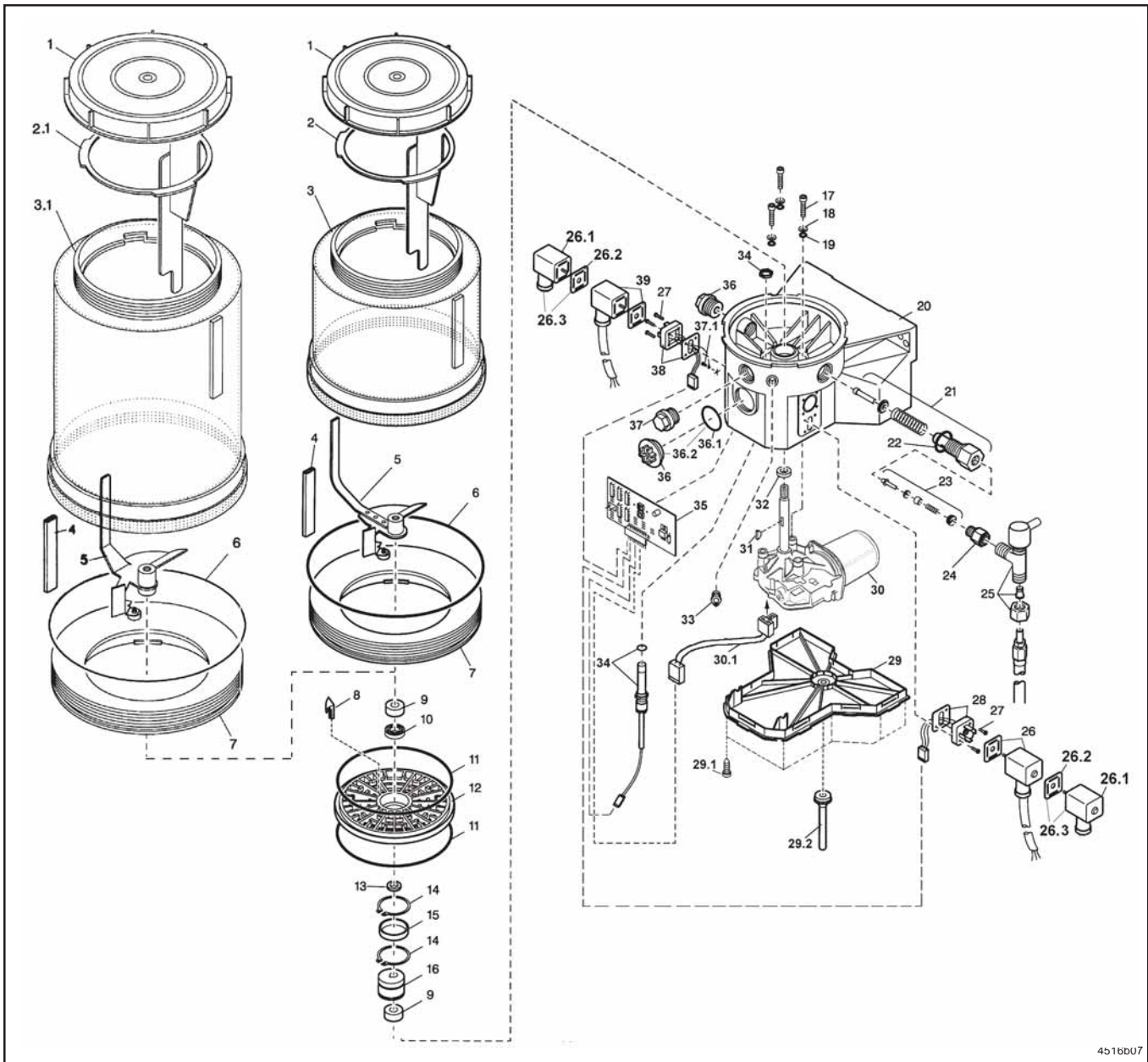


Fig. 19 - Explosion view for P 203 -4XLBO/8XLBO-.K.-12/24-2A1.01/10-V...

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Parts List acc. to Fig. 19

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	27	Screw BZ 3x10 C	8	206-13796-6
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	28	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	29	Housing cover	1	444-24667-1
3	Reservoir 4XNBO/4YNBO	1	544-31998-1		Housing cover, assy. since 1996	1	544-32217-1
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	29.1	Screw f. KF, 3x25	10	206-13796-7
4	Hose 10 cm	1	111-35089-2	29.2	Drain hose	1	444-24310-1
5	Stirring paddle, assy.	1	544-31954-1	30	Motor ^{1, 5}		
6	O-ring, Ø210x5	1	219-13730-9		with pos. 11, 17, 19, 30.1, 32		
7	Adapter ring	1	444-24235-1		12 VDC	1	544-36913-6
8	Control cam	1	444-24212-1		24 VDC	1	544-36913-7
9	Inner ring	2	444-24168-1		24 VDC for VAC connection ¹	1	544-36913-8
10	Grooved ball bearing D 10/26x8	1	250-14009-7	30.1	Motor connection	1	664-34195-2
11	O-ring Ø142x4	2	219-13730-7	31	Woodruff key 3x5	1	214-13123-1
12	Intermediate bottom	1	444-24167-1	32	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Shim 10x16x0.5	1	209-13047-5	33	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Snap ring SW 32	2	211-14100-1	34	Magnetic switch for		
15	Pressure ring Ø33x37x13	1	444-24439-1		low-level control	1	234-13162-4
16	Eccentric	1	444-24170-2	35	Control p.c.b. 12/24 VDC ¹ for industrial		
17	Hexagon socket head screw				application and commercial vehicles		
	M6x25, self-tapping ⁵	3	206-13710-8		Model V10 - V13	1	236-13891-1
18	Washer	3	444-24169-1		Model V20 - V23 ³	1	236-13891-2
19	O-ring Ø6x2	3	219-13084-2		Model M... ¹	1	236-13870-3
20	Housing	1	444-24666-1	36	Sealing plug, M33x2	1	233-13124-9
	Kit: housing assy. with housing			36.1	O-ring ø31x2	1	219-14138-2
	cover and tightening screws	1	544-32191-1	36.2	Sealing plug with O-ring	1	544-32851-1
21	Pump element with			37	Closure plug M22x1.5x12	2	303-19285-1
	K5=piston Ø5 mm, assy.	1	600-26875-2	38	Appliance plug 1 with cable ¹	1	664-36917-9
	K6=piston Ø6 mm, assy.	1	600-26876-2	38.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	K7=piston Ø7 mm, assy.	1	600-26877-2	39	Socket 1 (black) ¹		
	KR=Pump element, adjustable	1	655-26178-1		flat packing and 10 m cable	1	664-36078-7
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1				
23	Check valve Ø5 mm, assy.	1	504-36071-8		Power supply board 230 VAC ¹	1	544-36961-4
	Check valve Ø6 mm, assy.	1	504-36071-4		Arrow: direction of rotation	1	810-55106-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Lincoln-Logo sticker	1	810-55087-1
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5		Jumper for control p.c.b.	1	236-13898-1
25	Pressure relief valve ⁴						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				
26	Socket 2 (grey) ^{1, 2}						
	with flat packing and 10 m cable	1	664-36078-9				
26.1	Socket 1/2, (black) ^{1, 2}	2	236-13277-9				
26.2	Flat packing	2	236-13294-3				
26.3	Socket with flat packing ^{1,2}	2	544-32850-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l and 8-l reservoir for grease

with low-level control
 P.c.b. versions V10 - V13, V20 - V23
 connection type 1A7.16

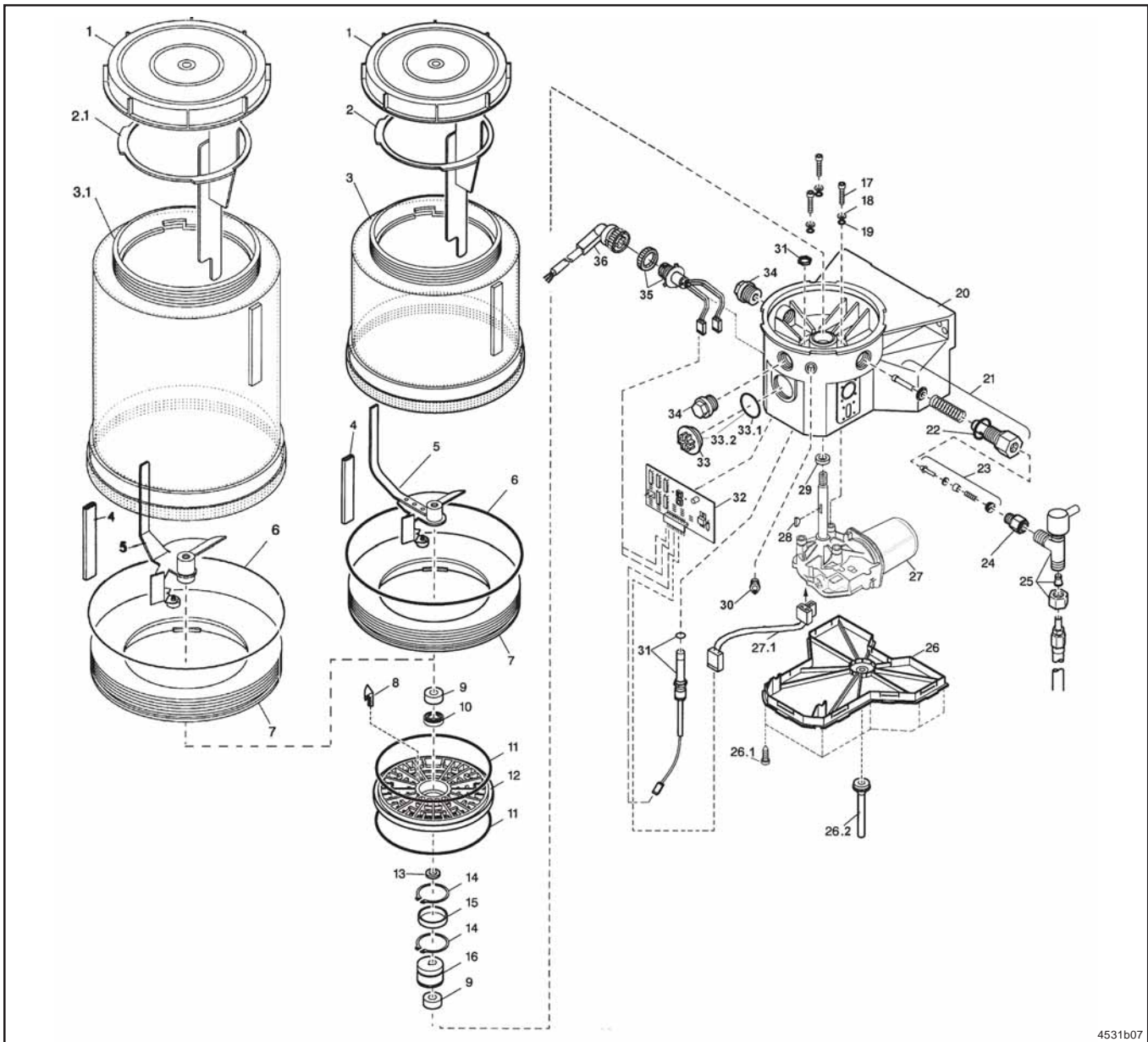


Fig. 20 - Explosion view for P 203 -4XLBO/8XLBO-.K.-12/24-1A7.16-V10-V...

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Parts List acc. to Fig. 20

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Lid	1	444-24234-1	26	Housing cover	1	444-24667-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1		Housing cover, assy. since 1996	1	544-32217-1
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	26.1	Screw f. KF, 3x25	10	206-13796-7
3	Reservoir 4XNBO/4YNBO	1	544-31998-1	26.2	Drain hose	1	444-24310-1
3.1	Reservoir 8XNBO/8YNBO	1	544-31999-1	27	Motor ^{1,4}		
4	Hose 10 cm	1	111-35089-2		with pos. 11, 17, 19, 27.1, 29		
5	Stirring paddle, assy.	1	544-31954-1		12 VDC	1	544-36913-6
6	O-ring, Ø210x5	1	219-13730-9		24 VDC	1	544-36913-7
7	Adapter ring	1	444-24235-1		24 VDC for VAC connection ¹	1	544-36913-8
8	Control cam	1	444-24212-1	27.1	Motor connection	1	664-34195-2
9	Inner ring	2	444-24168-1	28	Woodruff key 3x5	1	214-13123-1
10	Grooved ball bearing D 10/26x8	1	250-14009-7	29	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	O-ring Ø142x4	2	219-13730-7	30	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Intermediate bottom	1	444-24167-1	31	Magnetic switch for		
13	Shim 10x16x0.5	1	209-13047-5		low-level control	1	234-13162-4
14	Snap ring SW 32	2	211-14100-1	32	Control p.c.b. 12/24 VDC ¹ for industrial		
15	Pressure ring Ø33x37x13	1	444-24439-1		application and commercial vehicles		
16	Eccentric	1	444-24170-2		Model V10 - V13	1	236-13891-1
17	Hexagon socket head screw				Model V20 - V23 ²	1	236-13891-2
	M6x25, self-tapping ⁴	3	206-13710-8		Model M... ¹	1	236-13870-3
18	Washer	3	444-24169-1	33	Sealing plug, M33x2	1	233-13124-9
19	O-ring Ø6x2	3	219-13084-2	33.1	O-ring ø31x2	1	219-14138-2
20	Housing	1	444-24666-1	33.2	Sealing plug with O-ring	1	544-32851-1
	Kit: housing assy. with housing			34	Closure plug M22x1.5x12	2	303-19285-1
	cover and tightening screws	1	544-32191-1	35	Bayonet plug 1 with cable ¹ ,		
21	Pump element with				7/6-pole	1	664-34167-3
	K5=piston Ø5 mm, assy.	1	600-26875-2	36	Bayonet cable, 7/6-core	1	664-34167-5
	K6=piston Ø6 mm, assy.	1	600-26876-2				
	K7=piston Ø7 mm, assy.	1	600-26877-2				
	KR=Pump element, adjustable	1	655-26178-1		Power supply board 230 VAC ¹	1	544-36961-4
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction of rotation	1	810-55106-1
23	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
25	Pressure relief valve ³						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² ontrol p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

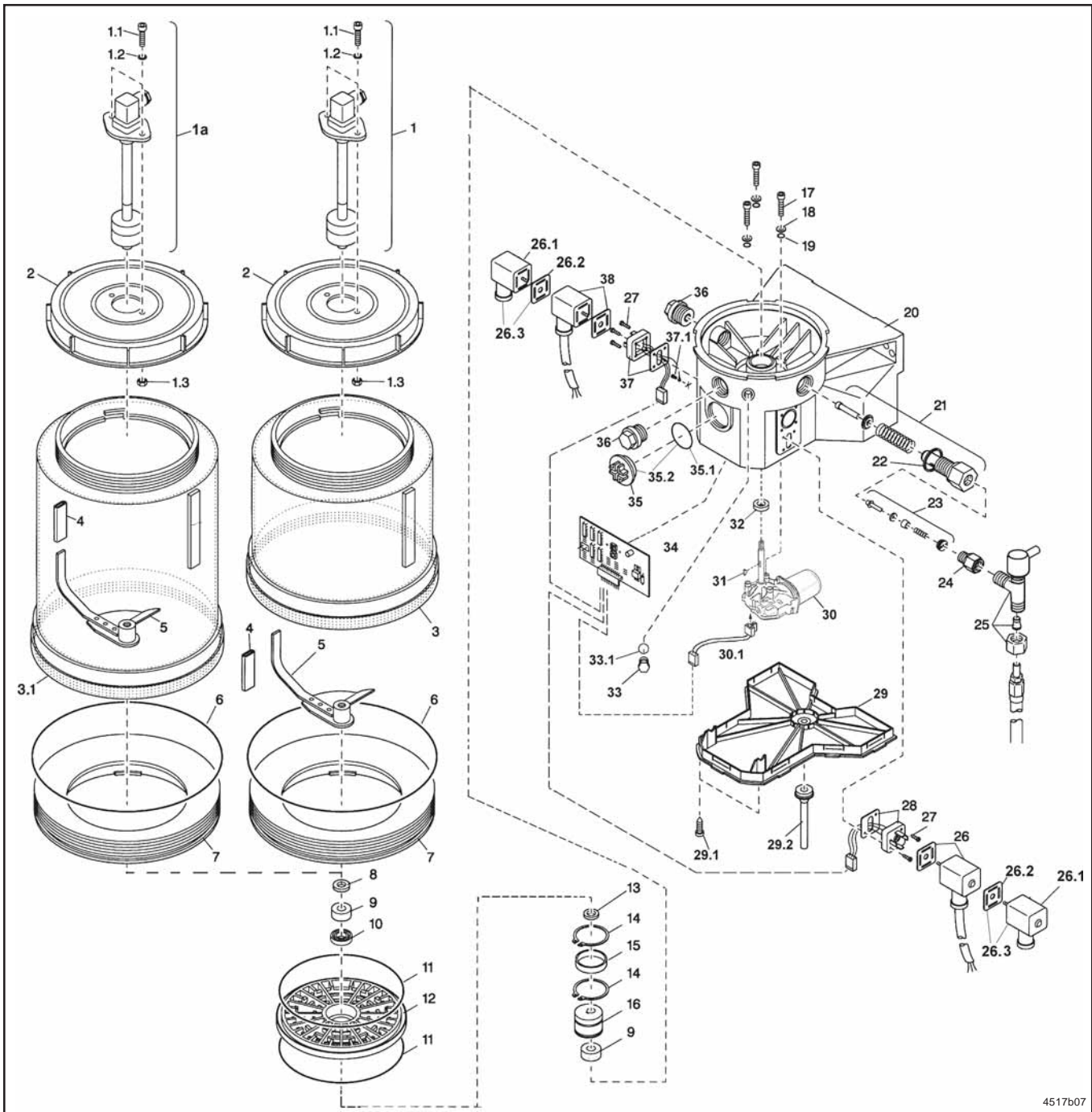
Subject to modifications

4-l and 8-l reservoir for oil

with low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1A1.01/10, 2A1.01/10



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Fig. 21 - Explosion view for P 203 -4YLBO/8YLBO-K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 21

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Low-level control, 4YLBO (magnetic floating switch)	1	444-24990-1	26	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9
1a	Low-level control, 8YLBO (magnetic floating switch)	1	444-24283-1	26.1	Socket 1/2, (black) ^{1, 2}	1	236-13277-9
1.1	Hexagon socket head screw M6x20 C	2	201-12018-5	26.2	Flat packing	1	236-13294-3
1.2	Washer A 6.4 C	2	209-13011-5	26.3	Socket with flat packing ^{1, 2}	2	544-32850-1
1.3	Hexagonal nut M6 C	2	207-12135-5	27	Screw BZ 3x10 C	8	206-13796-6
2	Lid	1	444-24282-1	28	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
3	Reservoir 4XNBO /4YNBO	1	544-31998-1	29	Housing cover	1	444-24666-1
3.1	Reservoir 8XNBO /8YNBO	1	544-31999-1		Housing cover, assy. since 1996	1	544-32217-1
4	Hose 3 cm	1	111-35089-2	29.1	Screw f. KF, 3x25	10	206-13796-7
5	Stirring paddle, assy.	1	544-31929-1	29.2	Drain hose	1	444-24310-1
6	O-ring, Ø210x5	1	219-13730-9	30	Motor ^{1, 5} with pos. 11, 17, 19, 30.1, 32		
7	Adapter ring	1	444-24235-1		12 VDC	1	544-36913-6
9	Inner ring	2	444-24168-1		24 VDC	1	544-36913-7
10	Grooved ball bearing D 10/26x8	1	250-14009-7	30.1	Motor connection	1	544-36913-8
11	O-ring Ø142x4	2	219-13730-7	31	Woodruff key 3x5	1	664-34195-2
12	Intermediate bottom	1	444-24167-1	32	Rotary shaft seal BA 10x22x7	1	214-13123-1
13	Shim 10x16x0.5	1	209-13047-5	33	Closure plug R 1/4x87	1	220-12231-3
14	Snap ring SW 32	2	211-14100-1	33.1	O-ring Ø11x2	1	303-17513-1
15	Pressure ring Ø33x37x13	1	444-24439-1	34	O-ring	1	219-12223-4
16	Eccentric	1	444-24170-2		Control p.c.b. 12/24 VDC ¹ for industrial application		
17	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8		Model V10 - V13	1	236-13891-1
18	Washer	3	444-24169-1		Model V20 - V23 ³	1	236-13891-2
19	O-ring Ø6x2	3	219-13084-2		Model M... ¹	1	236-13870-3
20	Housing	1	444-24666-1	35	Sealing plug, M33x2	1	233-13124-9
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	35.1	O-ring ø31x2	1	219-14138-2
21	Pump element with			35.2	Sealing plug with O-ring	1	544-32851-1
	K5=piston Ø5 mm, assy.	1	600-26875-2	36	Closure plug KF M 22x1.5	2	303-19285-1
	K6=piston Ø6 mm, assy.	1	600-26876-2	37	Appliance plug 1 with cable ¹	1	664-36917-9
	K7=piston Ø7 mm, assy.	1	600-26877-2	37.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	KR=Pump element, adjustable	1	655-26178-1	38	Socket 1 (black) ¹ with flat packing and 10 m cable	1	664-36078-7
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Power supply board 230 VAC ¹	1	544-36961-4
23	Check valve Ø5 mm, assy.	1	504-36071-8		Arrow: direction of rotation	1	810-55106-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Jumper for control p.c.b.	1	236-13898-1
24	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
25	Pressure relief valve ⁴ SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Note: connection 2A1. 10 (pos. 26, 27, 28) only for external triggering of an additional lubrication.

Subject to modifications

4-l and 8-l reservoir for oil

with low-level control

P.c.b. versions V10 - V13, V20 - V23

connection types 1A5.14, 1A7.16

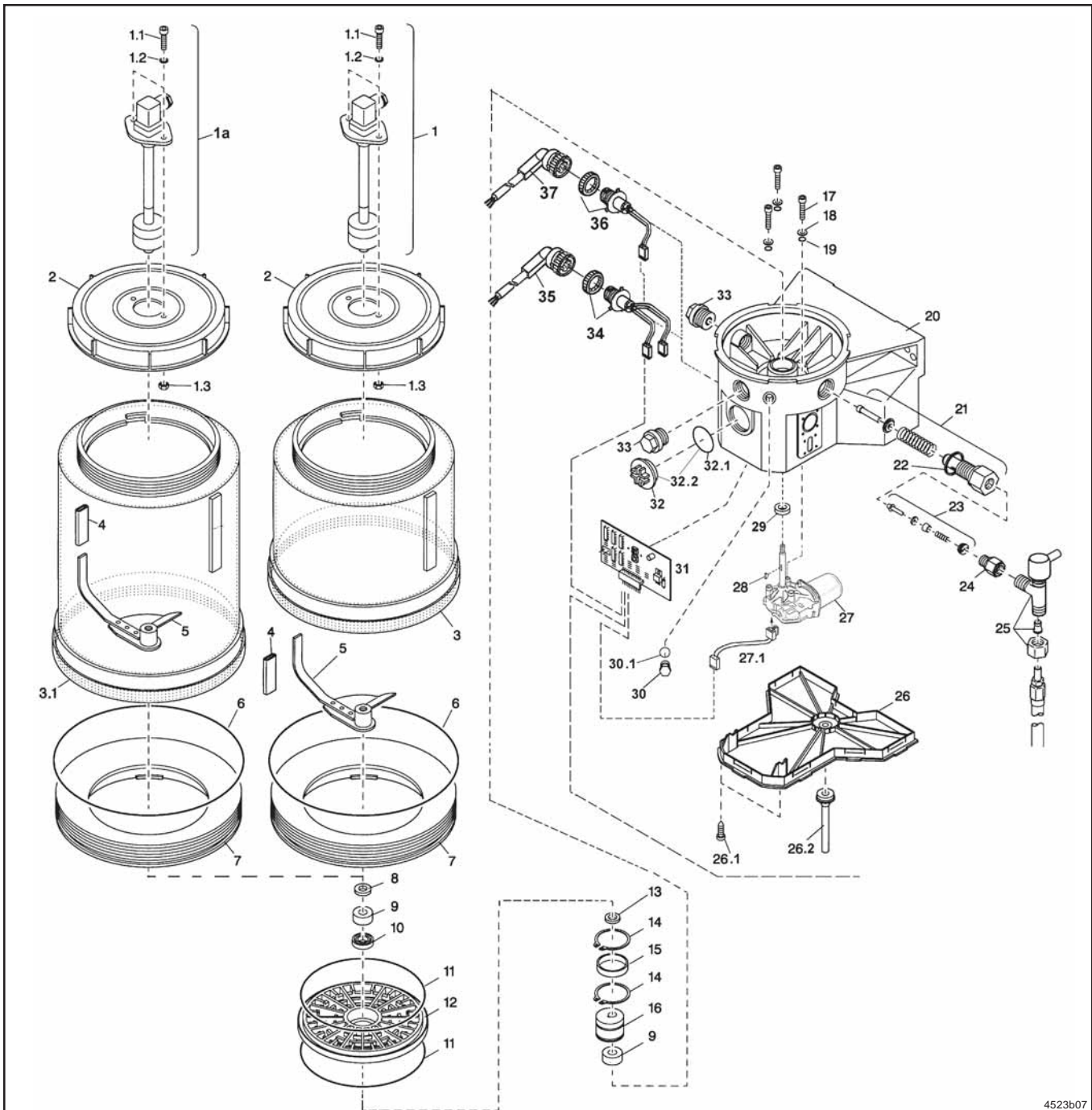


Fig. 22 - Explosion view for P 203 -4YLBO/8YLBO-.K.-12/24-1A5.14/1A7.16-V...

4523b07

Parts List acc. to Fig. 22

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Low-level control, 4YLBO (magnetic floating switch)	1	444-24990-1	26	Housing cover	1	444-24666-1
1a	Low-level control, 8YLBO (magnetic floating switch)	1	444-24283-1		Housing cover, assy. since 1996	1	544-32217-1
1.1	Hexagon socket head screw M6x20 C	2	201-12018-5	26.1	Screw f. KF, 3x25	10	206-13796-7
1.2	Washer A 6.4 C	2	209-13011-5	29.2	Drain hose	1	444-24310-1
1.3	Hexagonal nut M6 C	2	207-12135-5	27	Motor ^{1,4}		
2	Lid	1	444-24282-1		with pos. 11, 17, 19, 27.1, 29		
3	Reservoir 4XNBO /4YNBO	1	544-31998-1		12 VDC	1	544-36913-6
3.1	Reservoir 8XNBO /8YNBO	1	544-31999-1		24 VDC	1	544-36913-7
4	Hose 3 cm	1	111-35089-2		24 VDC for VAC connection ¹	1	544-36913-8
5	Stirring paddle, assy.	1	544-31929-1	27.1	Motor connection	1	664-34195-2
6	O-ring, Ø210x5	1	219-13730-9	28	Woodruff key 3x5	1	214-13123-1
7	Adapter ring	1	444-24235-1	29	Rotary shaft seal BA 10x22x7	1	220-12231-3
8	Washer 8,4	1	209-13072-6	30	Closure plug R 1/4x87	1	303-17513-1
9	Inner ring	2	444-24168-1	30.1	O-ring Ø11x2	1	219-12223-4
10	Grooved ball bearing D 10/26x8	1	250-14009-7	31	Control p.c.b. 12/24 VDC ¹		
11	O-ring Ø142x4	2	219-13730-7		for industrial application		
12	Intermediate bottom	1	444-24167-1		Model V10 - V13	1	236-13891-1
13	Shim 10x16x0.5	1	209-13047-5		Model V20 - V23 ²	1	236-13891-2
14	Snap ring SW 32	2	211-14100-1	32	Sealing plug, M33x2	1	233-13124-9
15	Pressure ring Ø33x37x13	1	444-24439-1	32.1	O-ring ø31x2	1	219-14138-2
16	Eccentric	1	444-24170-2	32.2	Sealing plug with O-ring	1	544-32851-1
17	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	33	Closure plug KF M 22x1.5	2	303-19285-1
18	Washer	3	444-24169-1	34	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
19	O-ring Ø6x2	3	219-13084-2	35	Bayonet cable, 7/6-core	1	664-34167-5
20	Housing	1	444-24666-1	36	Bayonet plug 1 with cable ¹ , 4/3-pole (1A5.14)	1	664-34041-5
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	37	Bayonet cable, 4/3-core	1	664-34167-6
21	Pump element with				Power supply board 230 VAC ¹	1	544-36961-4
	K5=piston Ø5 mm, assy.	1	600-26875-2		Arrow: direction of rotation	1	810-55106-1
	K6=piston Ø6 mm, assy.	1	600-26876-2		Lincoln-Logo sticker	1	810-55087-1
	K7=piston Ø7 mm, assy.	1	600-26877-2		Jumper for control p.c.b.	1	236-13898-1
	KR=Pump element, adjustable	1	655-26178-1				
22	Sealing ring Ø22.2x27x1.5	1	306-17813-1				
23	Check valve Ø5 mm, assy.	1	504-36071-8				
	Check valve Ø6 mm, assy.	1	504-36071-4				
	Check valve Ø7 mm, assy.	1	504-36071-9				
24	Nippel S 2520-1/4-1/4-25	1	226-14105-5				
25	Pressure relief valve3						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l and 8-l reservoir for grease or oil, closed

without low-level control
without control p.c.b.
connection type 1A1.01/10

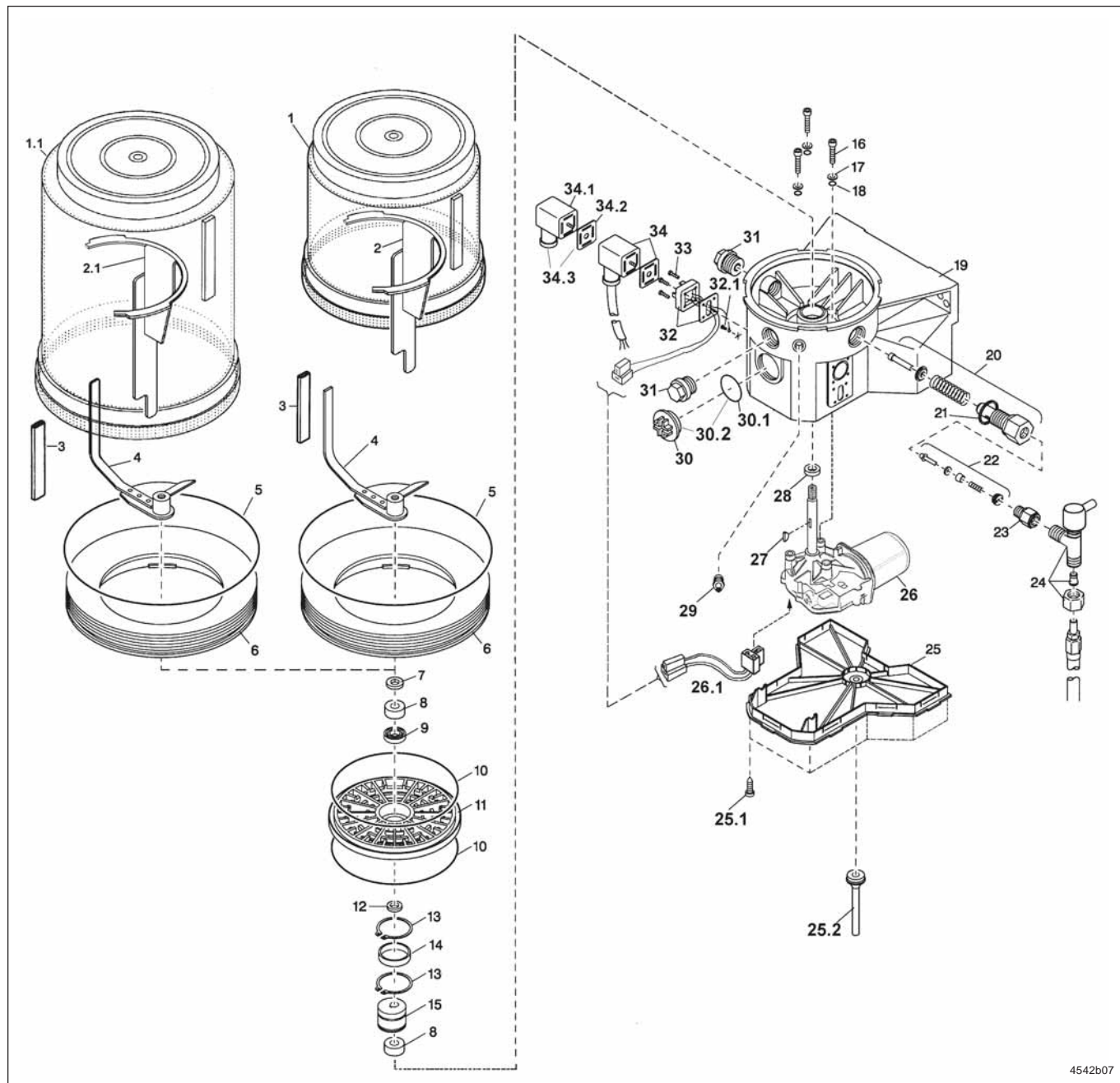


Fig. 23 - Explosion view for P 203 -4XN/8XN-.K.-12/24-1A1.01/10

4542b07

Parts List acc. to Fig. 23

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	24	Pressure relief valve ³		
1.1	Reservoir 8XN/8YN	1	544-32696-1		SVTE - 350 - 1/4 - D 6	1	624-28894-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	25	Housing cover	1	444-24667-1
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1		Housing cover, assy. since 1996	1	544-32217-1
3	Hose 10 cm	1	111-35089-2	25.1	Screw f. KF, 3x25	10	206-13796-7
4	Stirring paddle, assy.	1	544-31954-1	25.2	Drain hose	1	444-24310-1
5	O-ring, Ø210x5	1	219-13730-9	26	Motor ^{1,4}		
6	Adapter ring	1	444-24235-1		with pos. 10, 16, 18, 26.1, 28		
7	Washer 8.4	1	209-13072-6		12 VDC	1	544-36913-3
8	Inner ring	2	444-24168-1		24 VDC	1	544-36913-4
9	Grooved ball bearing D 10/26x8	1	250-14009-7		24 VDC for VAC connection ¹	1	544-36913-8
10	O-ring Ø142x4	2	219-13730-7	26.1	Adapter cable ⁵	1	664-34195-8
11	Intermediate bottom	1	444-24167-1	27	Woodruff key 3x5	1	214-13123-1
12	Shim 10x16x0.5	1	209-13047-5	28	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Snap ring SW 32	2	211-14100-1	29	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Pressure ring Ø33x37x13	1	444-24439-1	30	Sealing plug, M33x2	1	233-13124-9
15	Eccentric	1	444-24170-2	30.1	O-ring ø31x2	1	219-14138-2
16	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	30.2	Sealing plug with O-ring	1	544-32851-1
17	Washer	3	444-24169-1	31	Closure plug M22x1.5x12	2	303-19285-1
18	O-ring Ø6x2	3	219-13084-2	32	Appliance plug 1 with cable	1	664-34195-5
19	Housing Kit: housing assy. with housing cover and tightening screws	1	444-24666-1	32.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
20	Pump element with K5=piston Ø5 mm, assy. K6=piston Ø6 mm, assy. K7=piston Ø7 mm, assy. C7=piston Ø7 mm, assy. for chisel paste KR=Pump element, adjustable	1 1 1 1 1 1	544-32191-1 600-26875-2 600-26876-2 600-26877-2 600-28750-1 655-26178-1	33	Screw 13796-6		
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1	34	Socket 1 (black) ¹		
22	Check valve Ø5 mm, assy. Check valve Ø6 mm, assy. Check valve Ø7 mm, assy.	1 1 1	504-36071-8 504-36071-4 504-36071-9		with flat packing and 10 m cable	1	664-36078-7
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5	34.1	Socket 1 (black) ¹	1	236-13277-9
				34.2	Flat packing	1	236-13294-3
				34.3	Socket with flat packing ^{1,2}	2	544-32850-1
					Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁵ part of the motor kit

Subject to modifications

4-l and 8-l reservoir for grease, closed

with low-level control
without control p.c.b.
connection type 2A1.01/10

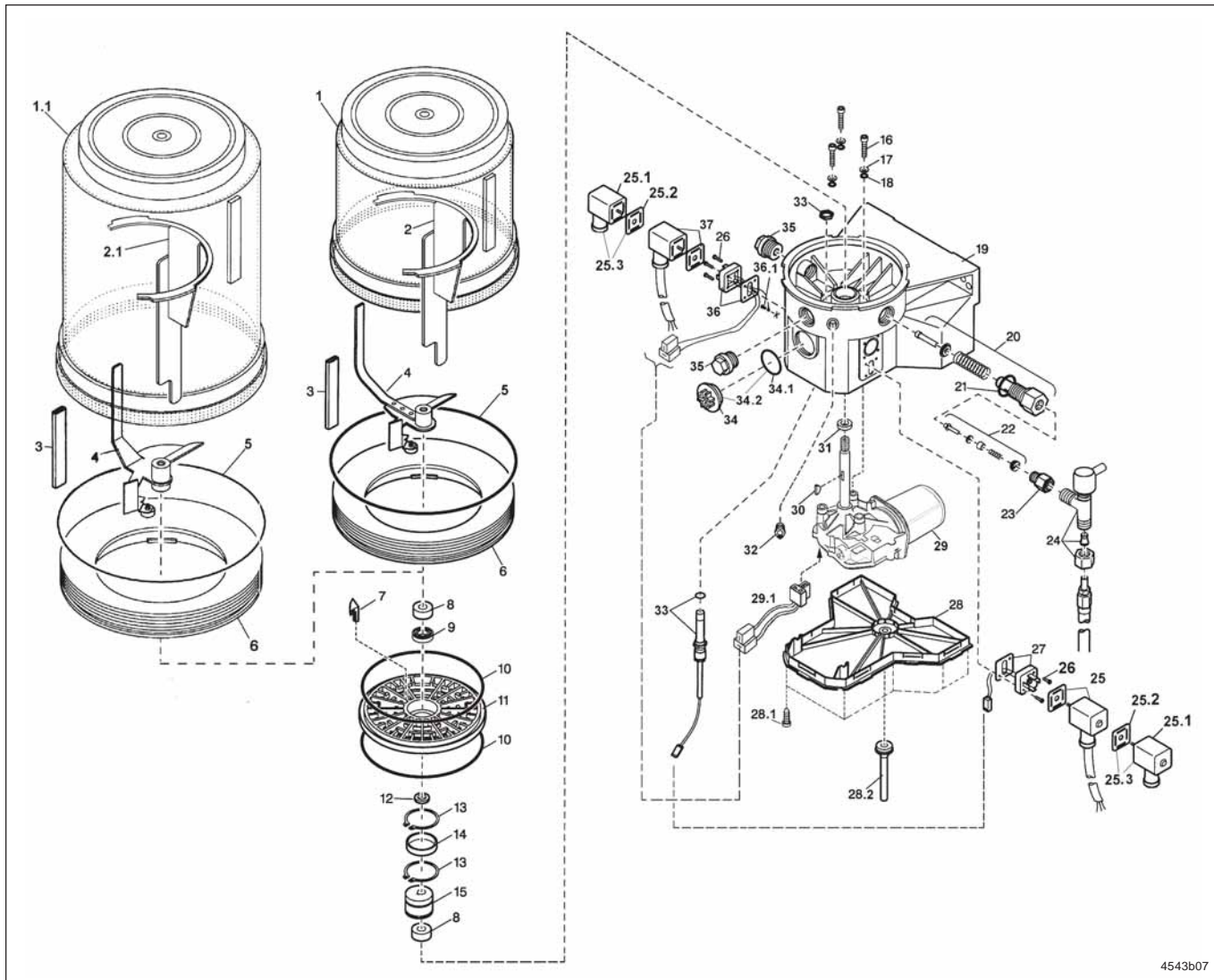


Fig. 24 - Explosion view for P 203 -4XL/8XL-.K.-12/24-2A1.01/10

Parts List acc. to Fig. 24

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	24	Pressure relief valve ³		
1.1	Reservoir 8XN/8YN	1	544-32696-1		SVTE - 350 - 1/4 - D 6	1	624-28894-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	25	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	25.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9
3	Hose 10 cm	1	111-35089-2	25.2	Flat packing	2	236-13294-3
4	Stirring paddle, assy.	1	544-31954-1	25.3	Socket with flat packing ^{1,2}	2	544-32850-1
5	O-ring, Ø210x5	1	219-13730-9	26	Screw BZ 3x10 C	8	206-13796-6
6	Adapter ring	1	444-24235-1	27	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5
7	Control cam	1	444-24212-1	28	Housing cover	1	444-24667-1
8	Inner ring	2	444-24168-1		Housing cover, assy. since 1996	1	544-32217-1
9	Grooved ball bearing D 10/26x8	1	250-14009-7	28.1	Screw f. KF, 3x25	10	206-13796-7
10	O-ring Ø142x4	2	219-13730-7	28.2	Drain hose	1	444-24310-1
11	Intermediate bottom	1	444-24167-1	29	Motor ^{1,4}		
12	Shim 10x16x0.5	1	209-13047-5		with pos. 10, 16, 18, 29.1, 31		
13	Snap ring SW 32	2	211-14100-1		12 VDC	1	544-36913-3
14	Pressure ring Ø33x37x13	1	444-24439-1		24 VDC	1	544-36913-4
15	Eccentric	1	444-24170-2		24 VDC for VAC connection ¹	1	544-36913-8
16	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	29.1	Adapter cable ⁵	1	664-34195-8
17	Washer	3	444-24169-1	30	Woodruff key 3x5	1	214-13123-1
18	O-ring Ø6x2	3	219-13084-2	31	Rotary shaft seal BA 10x22x7	1	220-12231-3
19	Housing	1	444-24666-1	32	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	33	Magnetic switch for low-level control	1	234-13162-4
20	Pump element with K5=piston Ø5 mm, assy.	1	600-26875-2	34	Sealing plug, M33x2	1	233-13124-9
	K6=piston Ø6 mm, assy.	1	600-26876-2	34.1	O-ring ø31x2	1	219-14138-2
	K7=piston Ø7 mm, assy.	1	600-26877-2	34.2	Sealing plug with O-ring	1	544-32851-1
	C7=piston Ø7 mm, assy. for chisel paste	1	600-28750-1	35	Closure plug M22x1.5x12	2	303-19285-1
	KR=Pump element, adjustable	1	655-26178-1	36	Appliance plug 1 with cable	1	664-34195-5
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1	36.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
22	Check valve Ø5 mm, assy.	1	504-36071-8	37	Socket 1 (black) ¹		
	Check valve Ø6 mm, assy.	1	504-36071-4		with flat packing and 10 m cable	1	664-36078-7
	Check valve Ø7 mm, assy.	1	504-36071-9		Power supply board 230 VAC ¹	1	544-36961-4
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5		Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo sticker	1	810-55087-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for connection type 2A1

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁵ part of the motor kit

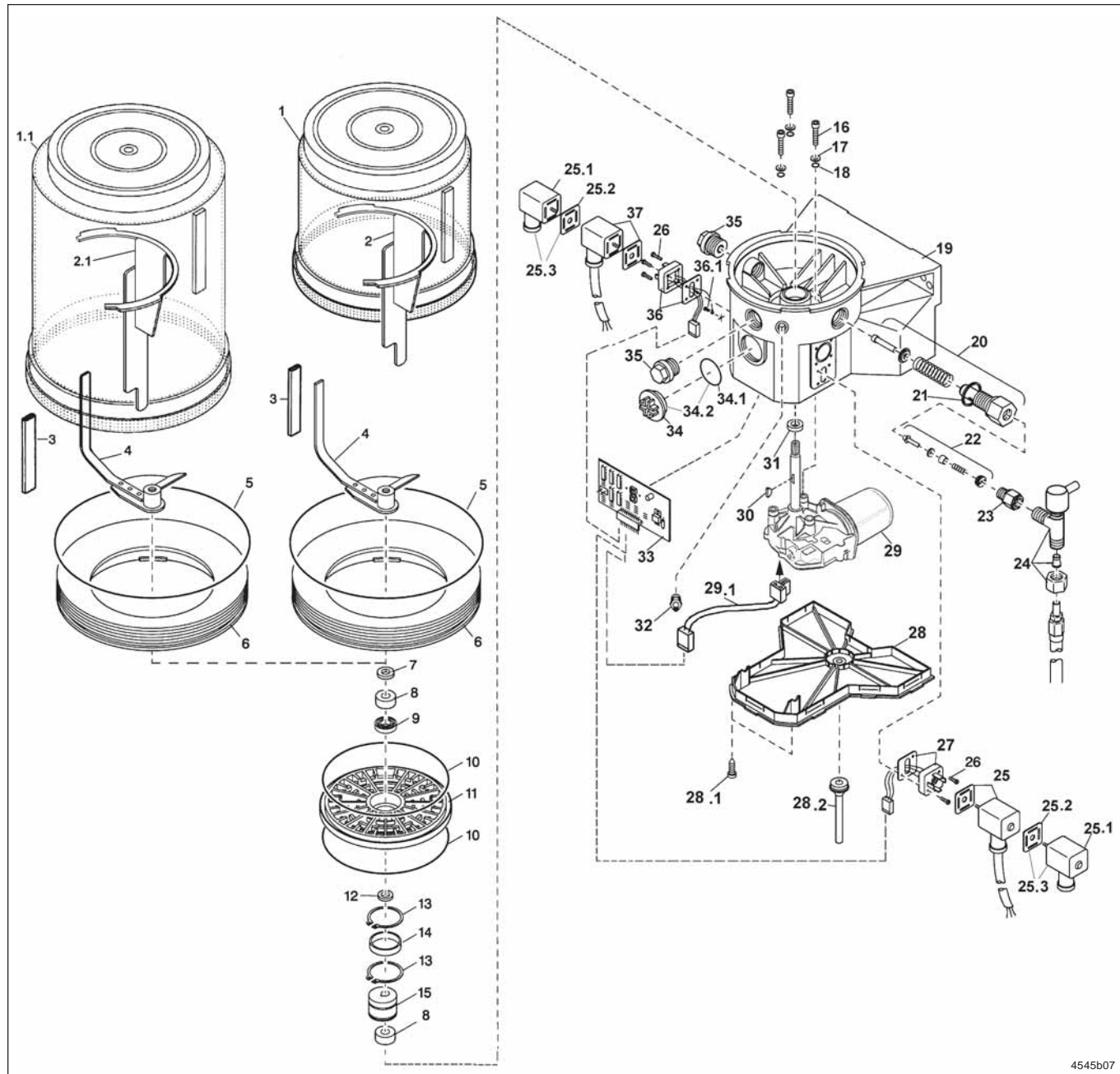
Subject to modifications

4-l and 8-l reservoir for grease

without low-level control

P.c.b. versions V10 - V13, V20 - V23

Connection types 1A1.01/10, 2A1.01/10



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Fig. 25 - Explosion view for P 203 -4XN/8XN-.K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 25

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	28	Housing cover	1	444-24667-1
1.1	Reservoir 8XN/8YN	1	544-32696-1		Housing cover, assy. since 1996	1	544-32217-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	28.1	Screw f. KF, 3x25	10	206-13796-7
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	28.2	Drain hose	1	444-24310-1
3	Hose 10 cm	1	111-35089-2	29	Motor ^{1,5}		
4	Stirring paddle, assy.	1	544-31954-1		with pos. 10, 16, 18, 29.1, 31		
5	O-ring, Ø210x5	1	219-13730-9		12 VDC	1	544-36913-6
6	Adapter ring	1	444-24235-1		24 VDC	1	544-36913-7
7	Washer 8.4	1	209-13072-6		24 VDC for VAC connection ¹	1	544-36913-8
8	Inner ring	2	444-24168-1	29.1	Motor connection	1	664-34195-2
9	Grooved ball bearing D 10/26x8	1	250-14009-7	30	Woodruff key 3x5	1	214-13123-1
10	O-ring Ø142x4	2	219-13730-7	31	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	Intermediate bottom	1	444-24167-1	32	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Shim 10x16x0.5	1	209-13047-5	33	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
13	Snap ring SW 32	2	211-14100-1		Model V10 - V13	1	236-13891-1
14	Pressure ring Ø33x37x13	1	444-24439-1		Model V20 - V23 ³	1	236-13891-2
15	Eccentric	1	444-24170-2		Model M... ¹	1	236-13870-3
16	Hexagon socket head screw M6x25, self-tapping ⁵	3	206-13710-8	34	Sealing plug, M33x2	1	233-13124-9
17	Washer	3	444-24169-1	34.1	O-ring ø31x2	1	219-14138-2
18	O-ring Ø6x2	3	219-13084-2	34.2	Sealing plug with O-ring	1	544-32851-1
19	Housing	1	444-24666-1	35	Closure plug M22x1.5x12	2	303-19285-1
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	36	Appliance plug 1 with cable ¹	1	664-36917-9
20	Pump element with K5=piston Ø5 mm, assy.	1	600-26875-2	36.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	K6=piston Ø6 mm, assy.	1	600-26876-2	37	Socket 1 (black) ¹ with flat packing and 10 m cable	1	664-36078-7
	K7=piston Ø7 mm, assy.	1	600-26877-2		Power supply board 230 VAC ¹	1	544-36961-4
	KR=Pump element, adjustable	1	655-26178-1		Arrow: direction of rotation	1	810-55106-1
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Lincoln-Logo sticker	1	810-55087-1
22	Check valve Ø5 mm, assy.	1	504-36071-8		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø6 mm, assy.	1	504-36071-4				
	Check valve Ø7 mm, assy.	1	504-36071-9				
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
24	Pressure relief valve ⁴						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				
25	Socket 2 (grey) ^{1, 2} with flat packing and 10 m cable	1	664-36078-9				
26	Screw BZ 3x10 C	8	206-13796-6				
27	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5				
27.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9				
27.2	Flat packing	2	236-13294-3				
27.3	Socket with flat packing ^{1, 2}	2	544-32850-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁴ other pressure relief valves, see Parts Catalog

⁵ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l and 8-l reservoir for grease

with low-level control

P.c.b. versions V10-V13, V20-V23

connection types 1A1.01/10, 2A1.01/10

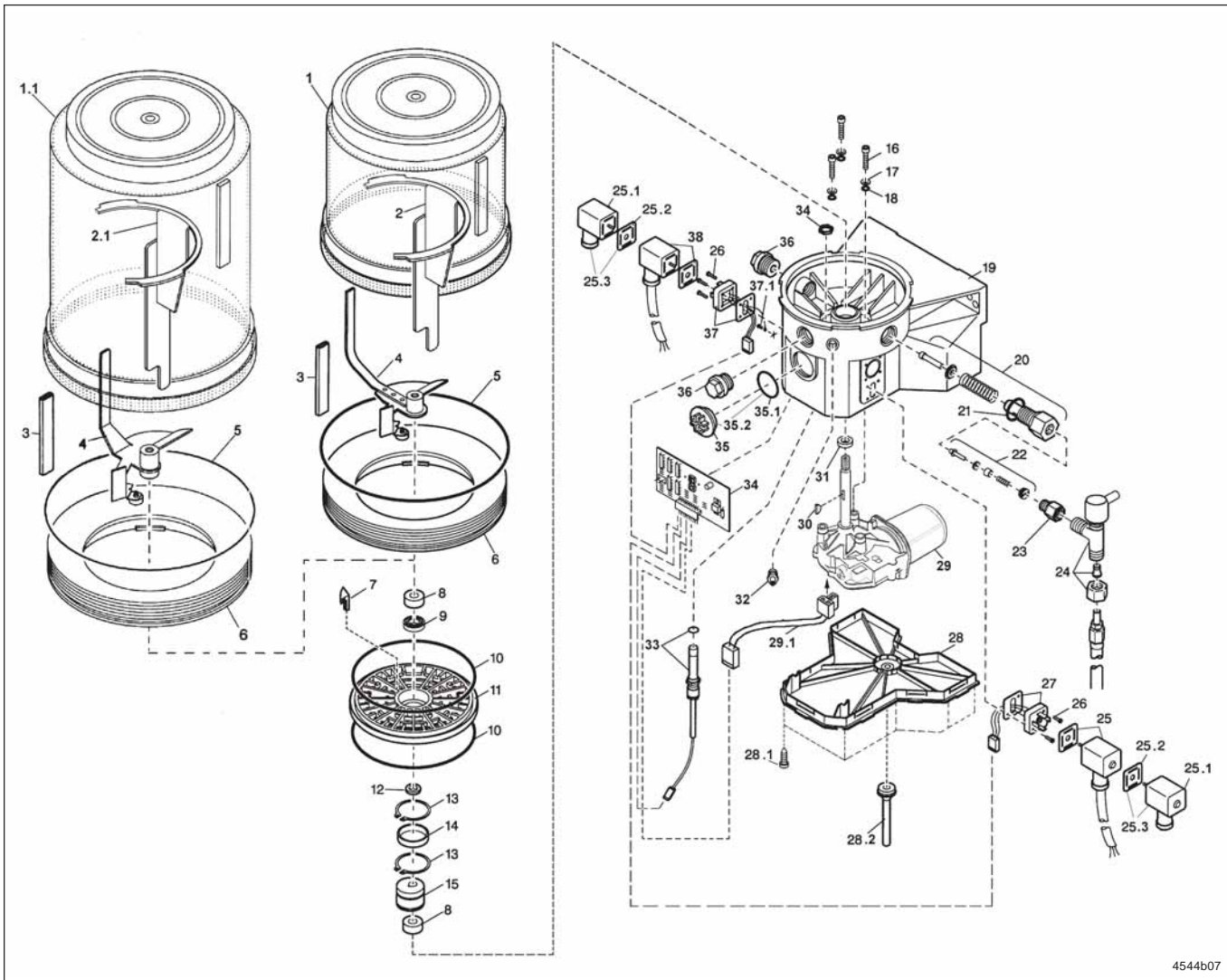


Fig. 26 - Explosion view for P 203 -4XL/8XL-.K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 26

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	28	Housing cover	1	444-24667-1
1.1	Reservoir 8XN/8YN	1	544-32696-1		Housing cover, assy. since 1996	1	544-32217-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	28.1	Screw f. KF, 3x25	10	206-13796-7
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	28.2	Drain hose	1	444-24310-1
3	Hose 10 cm	1	111-35089-2	29	Motor ^{1,5}		
4	Stirring paddle, assy.	1	544-31954-1		with pos. 10, 16, 18, 29.1, 37		
5	O-ring, Ø210x5	1	219-13730-9		12 VDC	1	544-36913-6
6	Adapter ring	1	444-24235-1		24 VDC	1	544-36913-7
7	Control cam	1	444-24212-1		24 VDC for VAC connection ¹	1	544-36913-8
8	Inner ring	2	444-24168-1	29.1	Motor connection	1	664-34195-2
9	Grooved ball bearing D 10/26x8	1	250-14009-7	30	Woodruff key 3x5	1	214-13123-1
10	O-ring Ø142x4	2	219-13730-7	31	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	Intermediate bottom	1	444-24167-1	32	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Shim 10x16x0.5	1	209-13047-5	33	Magnetic switch for		
13	Snap ring SW 32	2	211-14100-1		low-level control	1	234-13162-4
14	Pressure ring Ø33x37x13	1	444-24439-1	34	Control p.c.b. 12/24 VDC ¹ for industrial		
15	Eccentric	1	444-24170-2		application and commercial vehicles		
16	Hexagon socket head screw				Model V10 - V13	1	236-13891-1
	M6x25, self-tapping ⁵	3	206-13710-8		Model V20 - V23 ³	1	236-13891-2
17	Washer	3	444-24169-1		Model M... ¹	1	236-13870-3
18	O-ring Ø6x2	3	219-13084-2	35	Sealing plug, M33x2	1	233-13124-9
19	Housing	1	444-24666-1	35.1	O-ring ø31x2	1	219-14138-2
	Kit: housing assy. with housing			35.2	Sealing plug with O-ring	1	544-32851-1
	cover and tightening screws	1	544-32191-1	36	Closure plug M22x1.5x12	2	303-19285-1
20	Pump element with			37	Appliance plug 1 with cable ¹	1	664-36917-9
	K5=piston Ø5 mm, assy.	1	600-26875-2	37.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	K6=piston Ø6 mm, assy.	1	600-26876-2	38	Socket 1 (black) ¹		
	K7=piston Ø7 mm, assy.	1	600-26877-2		with flat packing and 10 m cable	1	664-36078-7
	KR=Pump element, adjustable	1	655-26178-1				
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Power supply board 230 VAC ¹	1	544-36961-4
22	Check valve Ø5 mm, assy.	1	504-36071-8		Arrow: direction of rotation	1	810-55106-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø7 mm, assy.	1	504-36071-9		Jumper for control p.c.b.	1	236-13898-1
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
24	Pressure relief valve ⁴						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				
25	Socket 2 (grey) ^{1, 2}						
	with flat packing and 10 m cable	1	664-36078-9				
25.1	Socket 1/2 (black) ^{1, 2}	2	236-13277-9				
25.2	Flat packing	2	236-13294-3				
25.3	Socket with flat packing ^{1,2}	2	544-32850-1				
26	Screw BZ 3x10 C	8	206-13796-6				
27	Appliance plug 2 with cable ^{1, 2}	1	664-36862-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² only for pump version 2A1

³ control p.c.b. for separate power supply 30, 15 and 31

⁵ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

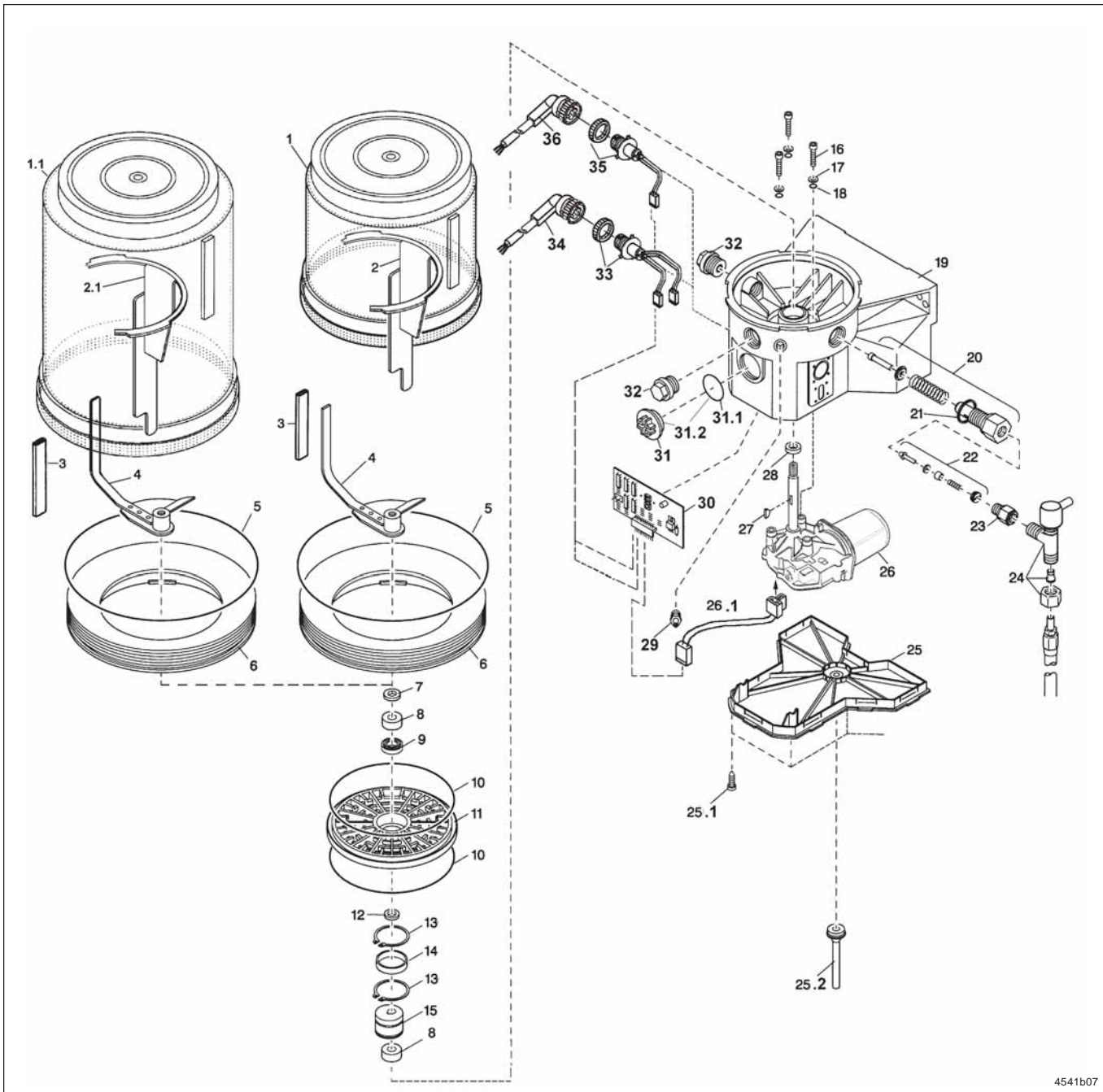
Subject to modifications

4-l and 8-l reservoir for grease

without low-level control

P.c.b. versions V10-V13, V20-V23

connection types 1 A5.14, 1A7.16



4541b07

Fig. 27 - Explosion view for P 203 -4XN/8XN-K.-12/24-1A5.14/1A7.16-V...

Parts List acc. to Fig. 27

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	25	Housing cover	1	444-24667-1
1.1	Reservoir 8XN/8YN	1	544-32696-1		Housing cover, assy. since 1996	1	544-32217-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	25.1	Screw f. KF, 3x25	10	206-13796-7
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	25.2	Drain hose	1	444-24310-1
3	Hose 10 cm	1	111-35089-2	26	Motor ^{1,4}		
4	Stirring paddle, assy.	1	544-31954-1		with pos. 10, 16, 18, 26.1, 28		
5	O-ring, Ø210x5	1	219-13730-9		12 VDC	1	544-36913-6
6	Adapter ring	1	444-24235-1		24 VDC	1	544-36913-7
7	Washer 8.4	1	209-13072-6		24 VDC for VAC connection ¹	1	544-36913-8
8	Inner ring	2	444-24168-1	26.1	Motor connection	1	664-34195-2
9	Grooved ball bearing D 10/26x8	1	250-14009-7	27	Woodruff key 3x5	1	214-13123-1
10	O-ring Ø142x4	2	219-13730-7	28	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	Intermediate bottom	1	444-24167-1	29	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Shim 10x16x0.5	1	209-13047-5	30	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
13	Snap ring SW 32	2	211-14100-1		Model V10 - V13	1	236-13891-1
14	Pressure ring Ø33x37x13	1	444-24439-1		Model V20 - V23 ²	1	236-13891-2
15	Eccentric	1	444-24170-2		Model M... ¹	1	236-13870-3
16	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	31	Sealing plug, M33x2	1	233-13124-9
17	Washer	3	444-24169-1	31.1	O-ring ø31x2	1	219-14138-2
18	O-ring Ø6x2	3	219-13084-2	31.2	Sealing plug with O-ring	1	544-32851-1
19	Housing	1	444-24666-1	32	Closure plug M22x1.5x12	2	303-19285-1
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	33	Bayonet plug 1 with cable ¹ , 7/6-pole (1A7.16)	1	664-36167-3
20	Pump element with K5=piston Ø5 mm, assy.	1	600-26875-2	34	Bayonet cable, 7/6-core	1	664-34167-5
	K6=piston Ø6 mm, assy.	1	600-26876-2	35	Bayonet plug 1 with cable ¹ , 4/3-pole (1A5.14)	1	664-34041-5
	K7=piston Ø7 mm, assy.	1	600-26877-2	36	Bayonet cable, 4/3-core	1	664-34167-6
	KR=Pump element, adjustable	1	655-26178-1		Power supply board 230 VAC ¹	1	544-36961-4
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction on rotation	1	810-55106-1
22	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
24	Pressure relief valve ³						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l and 8-l reservoir for grease

with low-level control
P.c.b. versions V10-V13, V20-V23
connection type 1A7.16

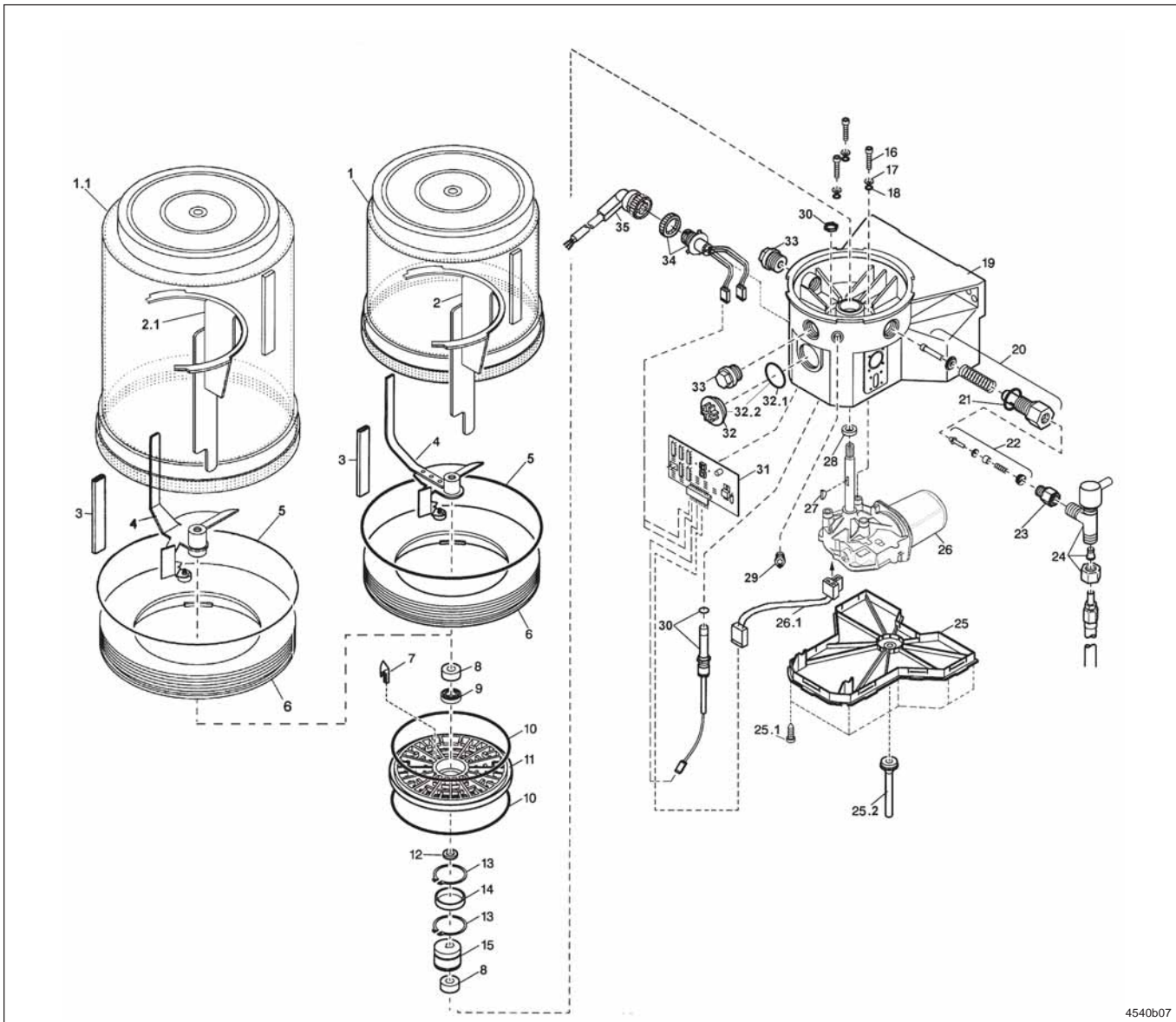


Fig. 28 - Explosion view for P 203 -4XL/8XL-.K.-12/24-1A7.16-V...

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Parts List acc. to Fig. 28

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Reservoir 4XN/4YN	1	544-32695-1	25	Housing cover	1	444-24667-1
1.1	Reservoir 8XN/8YN	1	544-32696-1		Housing cover, assy. since 1996	1	544-32217-1
2	Fixed paddle, assy.4XNBO/4YNBO	1	444-70490-1	25.1	Screw f. KF, 3x25	10	206-13796-7
2.1	Fixed paddle, assy.8XNBO/8YNBO	1	444-70491-1	25.2	Drain hose	1	444-24310-1
3	Hose 10 cm	1	111-35089-2	26	Motor ^{1,4}		
4	Stirring paddle, assy.	1	544-31954-1		with pos. 10, 16, 18, 26.1, 28		
5	O-ring, Ø210x5	1	219-13730-9		12 VDC	1	544-36913-6
6	Adapter ring	1	444-24235-1		24 VDC	1	544-36913-7
7	Control cam	1	444-24212-1		24 VDC for VAC connection ¹	1	544-36913-8
8	Inner ring	2	444-24168-1	26.1	Motor connection	1	664-34195-2
9	Grooved ball bearing D 10/26x8	1	250-14009-7	27	Woodruff key 3x5	1	214-13123-1
10	O-ring Ø142x4	2	219-13730-7	28	Rotary shaft seal BA 10x22x7	1	220-12231-3
11	Intermediate bottom	1	444-24167-1	29	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
12	Shim 10x16x0.5	1	209-13047-5	30	Magnetic switch for		
13	Snap ring SW 32	2	211-14100-1		low-level control	1	234-13162-4
14	Pressure ring Ø33x37x13	1	444-24439-1	31	Control p.c.b. 12/24 VDC ¹ for industrial		
15	Eccentric	1	444-24170-2		application and commercial vehicles		
16	Hexagon socket head screw				Model V10 - V13	1	236-13891-1
	M6x25, self-tapping ⁴	3	206-13710-8		Model V20 - V23 ²	1	236-13891-2
17	Washer	3	444-24169-1		Model M... ¹	1	236-13870-3
18	O-ring Ø6x2	3	219-13084-2	32	Sealing plug, M33x2	1	233-13124-9
19	Housing	1	444-24666-1	32.1	O-ring ø31x2	1	219-14138-2
	Kit: housing assy. with housing			32.2	Sealing plug with O-ring	1	544-32851-1
	cover and tightening screws	1	544-32191-1	33	Closure plug M22x1.5x12	2	303-19285-1
20	Pump element with			34	Bayonet plug 1 with cable ¹ ,		
	K5=piston Ø5 mm, assy.	1	600-26875-2		7/6-pole	1	664-34167-3
	K6=piston Ø6 mm, assy.	1	600-26876-2	35	Bayonet cable, 7/6-core	1	664-34167-5
	K7=piston Ø7 mm, assy.	1	600-26877-2				
	KR=Pump element, adjustable	1	655-26178-1		Power supply board 230 VAC ¹	1	544-36961-4
21	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction of rotation	1	810-55106-1
22	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
23	Nipple S 2520-1/4-1/4-25	1	226-14105-5				
24	Pressure relief valve ³						
	SVTE - 350 - 1/4 - D 6	1	624-28894-1				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

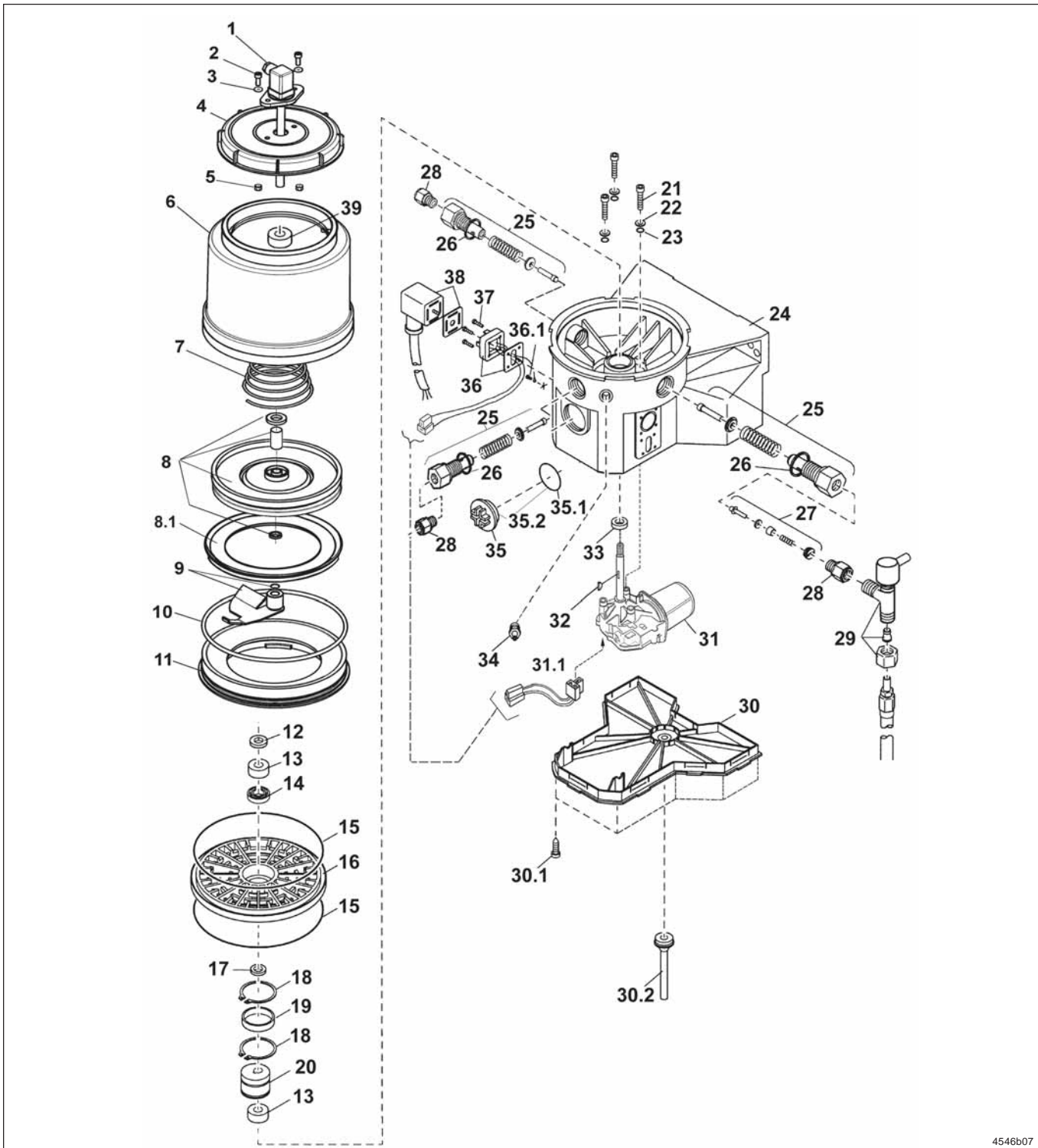
⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

4-l reservoir for grease

with follower plate and low-level control
without control p.c.b.
connection type 1A1.10



4546b07

Fig. 29 - Explosion view for P 203 -4XBF-3K.-12/24-1A1.10

Parts List acc. to Fig. 29

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Switch rod, L1 50, L2 135	1	234-13191-1	29	Pressure relief valve ²		
2	Hexagon socket head screw, M6x20	2	201-12018-5		SVTE - 350 - 1/4 - D 6	1	624-28894-1
3	Washer ST A6,4 C	2	209-13011-5	30	Housing cover	1	444-24667-1
3	Hexagonal nut, M6 C	2	207-12135-5		Housing cover, assy. since 1996	1	544-32217-1
4	Lid	1	444-70113-1	30.1	Screw f. KF, 3x25	10	206-13796-7
5	Hexagonal nut, M6 C	2	207-12135-5	30.2	Drain hose	1	444-24310-1
6	Reservoir 4XBF	1	544-32309-1	31	Motor ^{1,3}		
7	Compression spring, DF6 con.	1	300-19860-1		with pos. 11, 17, 19, 31.1, 33		
8	Follower plate, assy.	1	544-32803-1		12 VDC	1	544-36913-3
8.1	Sealing ring	1	220-12512-7		24 VDC	1	544-36913-4
9	Stirring paddle, assy.	1	544-32343-1		24 VDC for VAC connection ¹	1	544-36913-8
10	O-ring, Ø210x5	1	219-13730-9	31.1	Adapter cable ⁴	1	664-34195-8
11	Adapter ring	1	444-24235-1	32	Woodruff key 3x5	1	214-13123-1
12	Washer 8.4	1	209-13072-6	33	Rotary shaft seal BA 10x22x7	1	220-12231-3
13	Inner ring	2	444-24168-1	34	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
14	Grooved ball bearing D 10/26x8	1	250-14009-7	35	Sealing plug, M33x2	1	233-13124-9
15	O-ring Ø142x4	2	219-13730-7	35.1	O-ring ø31x2	1	219-14138-2
16	Intermediate bottom	1	444-24167-1	35.2	Sealing plug with O-ring	1	544-32851-1
17	Shim 10x16x0.5	1	209-13047-5	36	Appliance plug 1 with cable	1	664-34195-5
18	Snap ring SW 32	2	211-14100-1	36.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
19	Pressure ring Ø33x37x13	1	444-24439-1	37	Screw BZ 3x10 C	8	206-13796-6
20	Eccentric	1	444-24170-2	38	Socket 1 (black) ¹		
21	Hexagon socket head screw M6x25, self-tapping ³	3	206-13710-8		with flat packing and 10 m cable	1	664-36078-7
22	Washer	3	444-24169-1		Socket 1 (black) ¹	1	236-13277-9
23	O-ring Ø6x2	3	219-13084-2		Flat packing	1	236-13294-3
24	Housing	1	444-24666-1	39	Bearing bushing, SBZ D12/16x25	1	250-14066-7
25	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1		Power supply board 230 VAC ¹	1	544-36961-4
	Pump element with				Arrow: direction of rotation	1	810-55106-1
	K5=piston Ø5 mm, assy.	1	600-26875-2		Lincoln-Logo sticker	1	810-55087-1
	K6=piston Ø6 mm, assy.	1	600-26876-2				
	K7=piston Ø7 mm, assy.	1	600-26877-2				
	KR=Pump element, adjustable	1	655-26178-1				
26	Sealing ring Ø22.2x27x1.5	1	306-17813-1				
27	Check valve Ø5 mm, assy.	1	504-36071-8				
	Check valve Ø6 mm, assy.	1	504-36071-4				
	Check valve Ø7 mm, assy.	1	504-36071-9				
28	Nipple S 2520-1/4-1/4-25	1	226-14105-5				

¹ deviations of shown connection types of pump 203, see pages 80-88

² other pressure relief valves see Parts Catalog

³ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁴ part of the motor kit

Subject to modifications

8-l reservoir for grease

with follower plate and low-level control
without control p.c.b.
connection type 1A1.10

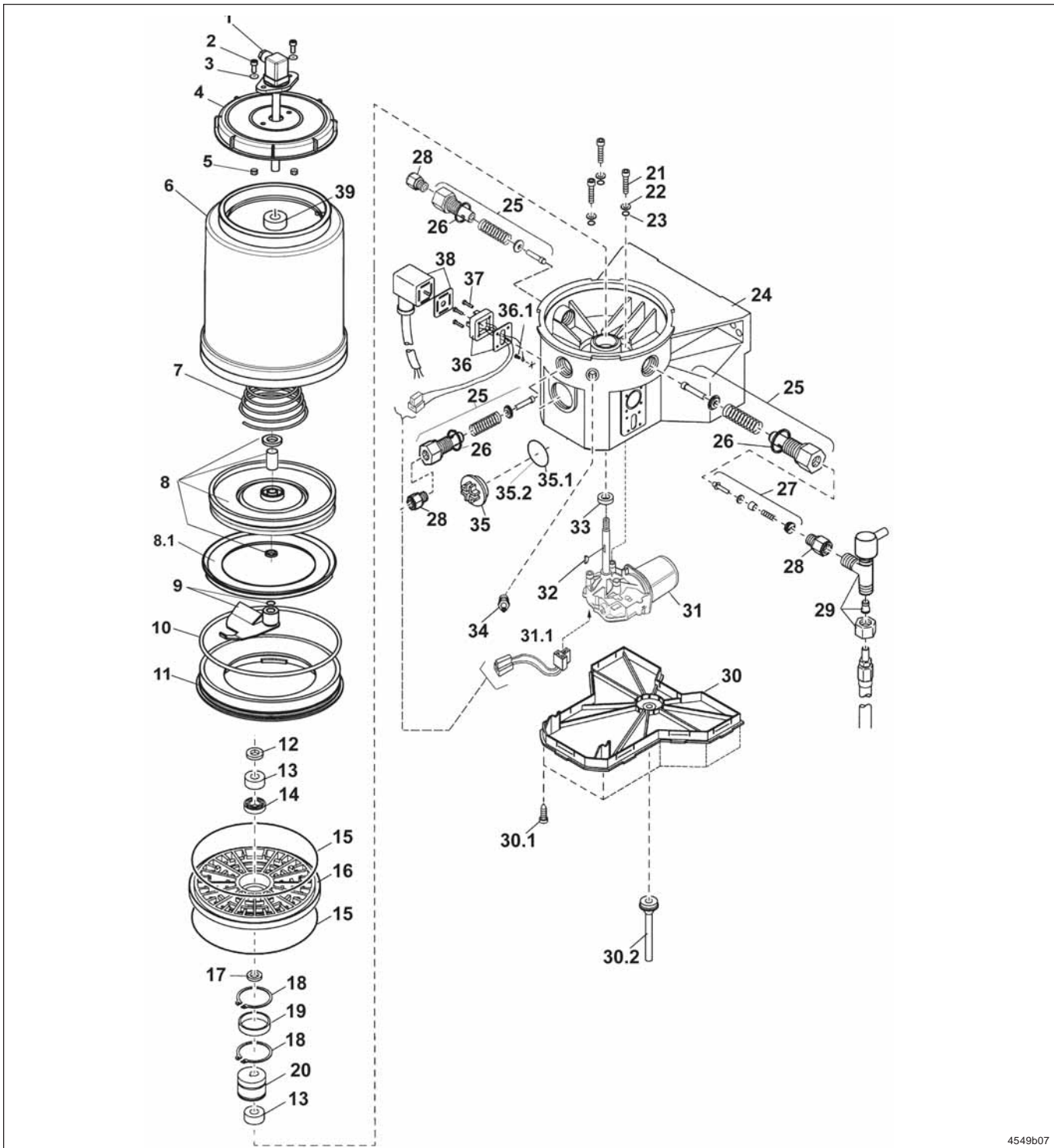


Fig. 30 - Explosion view for P 203 -8XBF-3K.-12/24-1A1.10

4549b07

Parts List acc. to Fig. 30

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Switch rod	1	234-13191-2	29	Pressure relief valve ²		
2	Hexagon socket head screw, M6x20	2	201-12018-5		SVTE - 350 - 1/4 - D 6	1	624-28894-1
3	Washer ST A6,4 C	2	209-13011-5	30	Housing cover	1	444-24667-1
4	Lid, schwarz	1	444-70113-1		Housing cover, assy. since 1996	1	544-32217-1
5	Hexagonal nut, M6 C	2	207-12135-5	30.1	Screw f. KF, 3x25	10	206-13796-7
6	Reservoir 8XBF	1	544-32311-1	30.2	Drain hose	1	444-24310-1
7	Compression ring, DF6 con.	1	300-19860-1	31	Motor ^{1,3}		
8	Follower plate, assy.	1	544-32803-1		with pos. 11, 17, 19, 31.1, 33		
8.1	Sealing ring	1	220-12512-7		12 VDC	1	544-36913-3
9	Stirring paddle, assy.	1	544-32343-1		24 VDC	1	544-36913-4
10	O-ring, Ø142x5	1	219-13730-9		24 VDC for VAC connection ¹	1	544-36913-8
11	Adapter ring	1	444-24235-1	31.1	Adapter cable ⁴	1	664-34195-8
12	Washer 8.4	1	209-13072-6	32	Woodruff key 3x5	1	214-13123-1
13	Inner ring	2	444-24168-1	33	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Grooved ball bearing D 10/26x8	1	250-14009-7	34	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø142x4	2	219-13730-7	35	Sealing plug, M33x2	1	233-13124-9
16	Intermediate bottom	1	444-24167-1	35.1	O-ring ø31x2	1	219-14138-2
17	Shim 10x16x0.5	1	209-13047-5	35.2	Sealing plug with O-ring	1	544-32851-1
18	Snap ring SW 32	2	211-14100-1	36	Appliance plug 1 with cable	1	664-34195-5
19	Pressure ring Ø33x37x13	1	444-24439-1	36.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
20	Eccentric	1	444-24170-2	37	Screw BZ 3x10 C	8	206-13796-6
21	Hexagon socket head screw M6x25, self-tapping 3	3	206-13710-8	38	Socket 1 (black) ¹		
22	Washer	3	444-24169-1		with flat packing and 10 m cable	1	664-36078-7
23	O-ring Ø6x2	3	219-13084-2		Socket 1 (black) ¹	1	236-13277-9
24	Housing	1	444-24666-1		Flat packing	1	236-13294-3
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	39	Bearing bushing, SBZ D12/16x25	1	250-14066-7
25	Pump element with K5=piston Ø5 mm assy.	1	600-26875-2		Power supply board 230 VAC ¹	1	544-36961-4
	K6=piston Ø6 mm assy.	1	600-26876-2		Arrow: direction of rotation	1	810-55106-1
	K7=piston Ø7 mm assy.	1	600-26877-2		Lincoln-Logo sticker	1	810-55087-1
	C7=piston Ø7 mm assy. for chisel paste	1	600-28750-1				
	KR=Pump element, adjustable	1	655-26178-1				
26	Sealing ring Ø22.2x27x1.5	1	306-17813-1				
27	Check valve Ø5 mm, assy.	1	504-36071-8				
	Check valve Ø6 mm, assy.	1	504-36071-4				
	Check valve Ø7 mm, assy.	1	504-36071-9				
28	Nipple S 2520-1/4-1/4-25	1	226-14105-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² other pressure relief valves see Parts Catalog

³ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

⁴ part of the motor kit

Subject to modifications

4-l reservoir for grease

with follower plate and low-level control
 P.c.b. versions V10 - V13, V20 - V23
 connection type 1A1.10

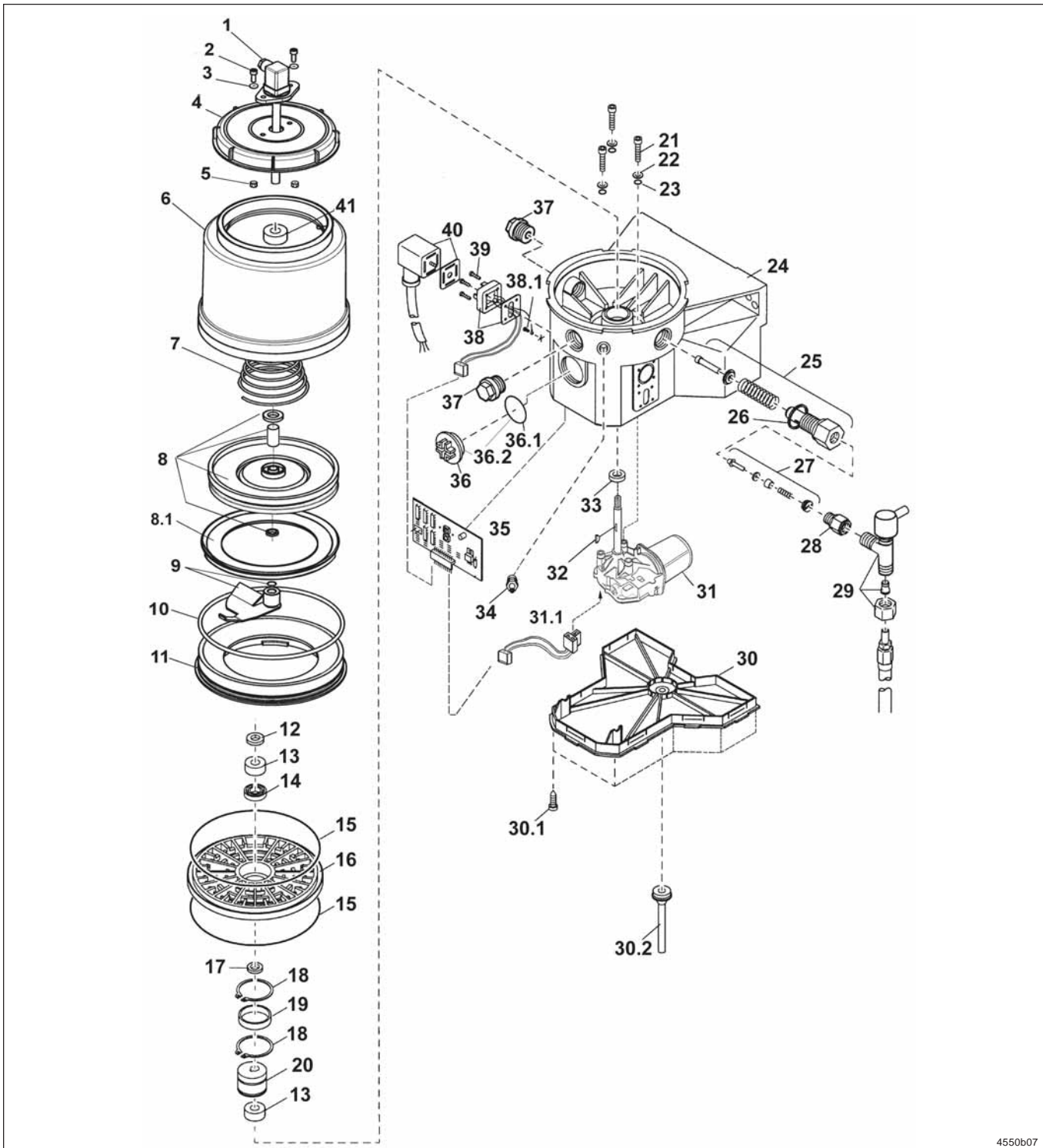


Fig. 31 - Explosion view for P 203 -4XBF-1K.-12/24-1A1.10-V...

4550b07

Parts List acc. to Fig. 31

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Switch rod	1	234-13191-1	29	Pressure relief valve ³		
2	Hexagon socket head screw, M6x20	2	201-12018-5		SVTE - 350 - 1/4 - D 6	1	624-28894-1
3	Washer ST A6,4 C	2	209-13011-5	30	Housing cover	1	444-24667-1
4	Lid	1	444-70113-1		Housing cover, assy. since 1996	1	544-32217-1
5	Hexagonal nut, M6 C	2	207-12135-5	30.1	Screw f. KF, 3x25	10	206-13796-7
6	Reservoir 4XBF	1	544-32309-1	30.2	Drain hose	1	444-24310-1
7	Compression spring, DF6 con.	1	300-19860-1	31	Motor ^{1,4}		
8	Follower plate, assy.	1	544-32803-1		with pos. 11, 17, 19, 31.1, 33		
8.1	Sealing ring	1	220-12512-7		12 VDC	1	544-36913-6
9	Stirring paddle, assy.	1	544-32343-1		24 VDC	1	544-36913-7
10	O-ring, Ø210x5	1	219-13730-9		24 VDC for VAC connection ¹	1	544-36913-8
11	Adapter ring	1	444-24235-1	31.1	Motor connection	1	664-34195-2
12	Washer 8.4	1	209-13072-6	32	Woodruff key 3x5	1	214-13123-1
13	Inner ring	2	444-24168-1	33	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Grooved ball bearing D 10/26x8	1	250-14009-7	34	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø142x4	2	219-13730-7	35	Control p.c.b. 12/24 VDC ¹ for industrial application and commercial vehicles		
16	Intermediate bottom	1	444-24167-1		Model V10 - V13	1	236-13891-1
17	Shim 10x16x0.5	1	209-13047-5		Model V20 - V23 ²	1	236-13891-2
18	Snap ring SW 32	2	211-14100-1		Model M...	1	236-13870-3
19	Pressure ring Ø33x37x13	1	444-24439-1	36	Sealing plug, M33x2	1	233-13124-9
20	Eccentric	1	444-24170-2	36.1	O-ring ø31x2	1	219-14138-2
21	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	36.2	Sealing plug with O-ring	1	544-32851-1
22	Washer	3	444-24169-1	37	Closure plug M22x1.5x12	2	303-19285-1
23	O-ring Ø6x2	3	219-13084-2	38	Appliance plug 1 with cable ¹	1	664-36917-9
24	Housing	1	444-24666-1	38.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	39	Screw BZ 3x10 C	8	206-13796-6
25	Pump element with			40	Socket 1 (black) ¹		
	K5=piston Ø5 mm, assy.	1	600-26875-2		with flat packing and 10 m cable	1	664-36078-7
	K6=piston Ø6 mm, assy.	1	600-26876-2		Socket 1 (black) ¹	1	236-13277-9
	K7=piston Ø7 mm, assy.	1	600-26877-2		Flat packing	1	236-13294-3
	C7=piston Ø7 mm, assy.			41	Bearing bushing, SBZ D12/16x25	1	250-14066-7
	for chisel paste	1	600-28750-1				
	KR=Pump element, adjustable	1	655-26178-1		Power supply board 230 VAC ¹	1	544-36961-4
26	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction of rotation	1	810-55106-1
27	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
28	Nipple S 2520-1/4-1/4-25	1	226-14105-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

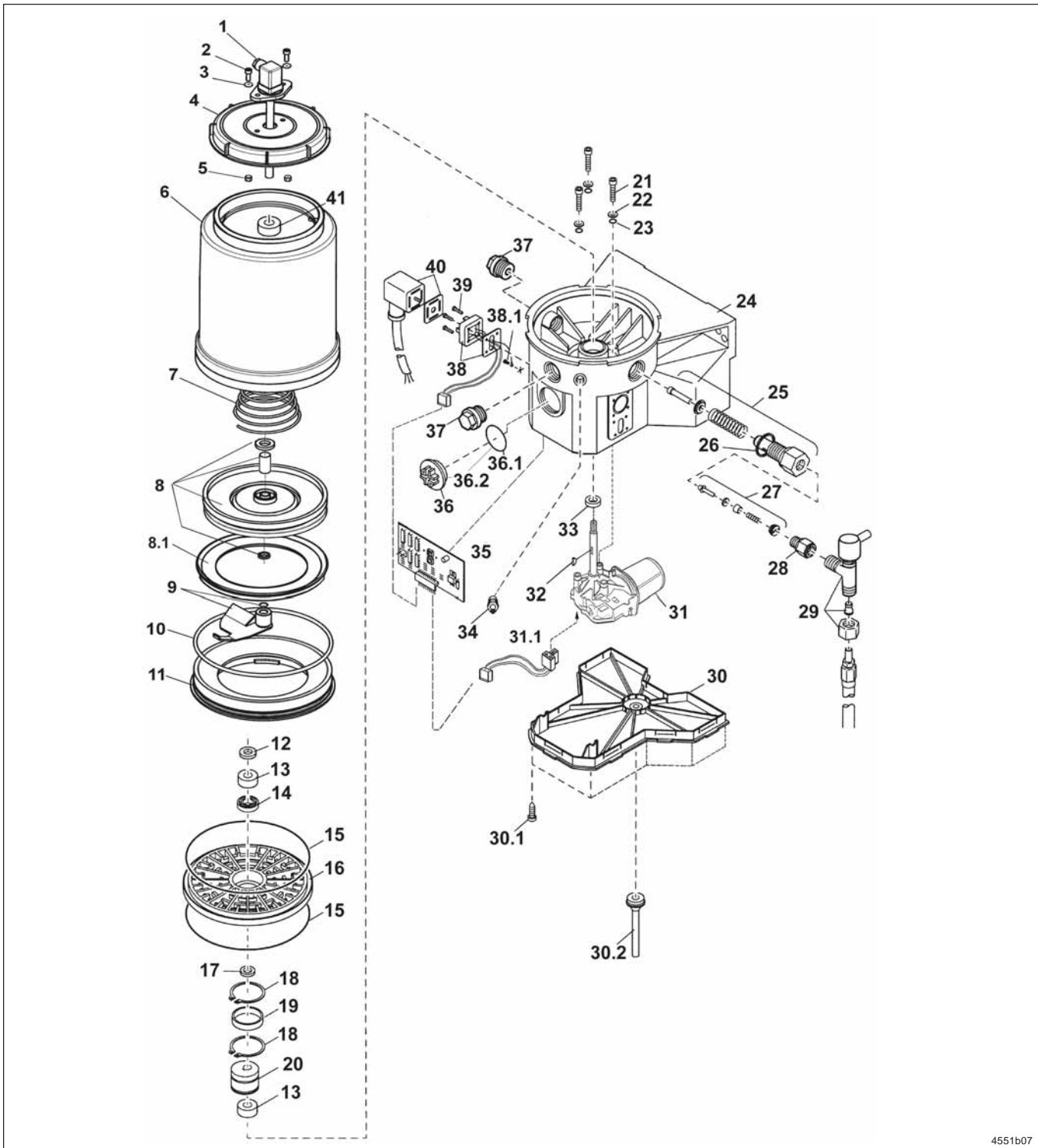
⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

8-l reservoir for grease

with follower plate and low-level control
 P.c.b. versions V10 - V13, V20 - V23
 connection type 1A1.10



4551b07

Fig. 32 - Explosion view for P 203 -8XBF-1K.-12/24-1A1.10-V...

Parts List acc. to Fig. 32

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Switch rod, L1=50,L2=236	1	234-13191-2	29	Pressure relief valve ³		
2	Hexagon socket head screw, M6x20	2	201-12018-5	30	SVTE - 350 - 1/4 - D 6	1	624-28894-1
3	Washer ST A 6,4 C	2	209-13011-5		Housing cover	1	444-24667-1
4	Lid	1	444-70113-1		Housing cover, assy. since 1996	1	544-32217-1
5	Hexagonal nut, M6 C	2	207-12135-5	30.1	Screw f. KF, 3x25	10	206-13796-7
6	Reservoir 8XBF	1	544-32311-1	30.2	Drain hose	1	444-24310-1
7	Compression spring, DF6 con.	1	300-19860-1	31	Motor ^{1,4}		
8	Follower plate, assy.	1	544-32803-1		with pos. 11, 17, 19, 31.1, 33		
8.1	Sealing ring	1	220-12512-7		12 VDC	1	544-36913-6
9	Stirring paddle, assy.	1	544-32343-1		24 VDC	1	544-36913-7
10	O-ring, Ø210x5	1	219-13730-9		24 VDC for VAC connection ¹	1	544-36913-8
11	Adapter ring	1	444-24235-1	31.1	Motor connection	1	664-34195-2
12	Washer 8.4	1	209-13072-6	32	Woodruff key 3x5	1	214-13123-1
13	Inner ring	2	444-24168-1	33	Rotary shaft seal BA 10x22x7	1	220-12231-3
14	Grooved ball bearing D 10/26x8	1	250-14009-7	34	Hydraulic lub. fitting AR 1/4 Z	1	251-14045-9
15	O-ring Ø142x4	2	219-13730-7	35	Control p.c.b. 12/24 VDC ¹ for industrial application and wind energy plants		
16	Intermediate bottom	1	444-24167-1		Model V10 - V13	1	236-13891-1
17	Shim 10x16x0.5	1	209-13047-5		Model V20 - V23 ²	1	236-13891-2
18	Snap ring SW 32	2	211-14100-1		Model M... ¹	1	236-13870-2
19	Pressure ring Ø33x37x13	1	444-24439-1	36	Sealing plug, M33x2	1	233-13124-9
20	Eccentric	1	444-24170-2	36.1	O-ring ø31x2	1	219-14138-2
21	Hexagon socket head screw M6x25, self-tapping ⁴	3	206-13710-8	36.2	Sealing plug with O-ring	1	544-32851-1
22	Washer	3	444-24169-1	37	Closure plug M22x1.5x12	2	303-19285-1
23	O-ring Ø6x2	3	219-13084-2	38	Appliance plug 1 with cable ¹	1	664-36917-9
24	Housing	1	444-24666-1	38.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7
	Kit: housing assy. with housing cover and tightening screws	1	544-32191-1	39	Screw BZ 3x10 C	4	206-13796-6
25	Pump element with			40	Socket 1 (black) ¹		
	K5=piston Ø5 mm, assy.	1	600-26875-2		with flat packing and 10 m cable	1	664-36078-7
	K6=piston Ø6 mm, assy.	1	600-26876-2		Socket 1 (black) ¹	1	236-13277-9
	K7=piston Ø7 mm, assy.	1	600-26877-2		Flat packing	1	236-13294-3
	C7=piston Ø7 mm, assy.			41	Bearing bushing, SBZ D12/16x25	1	250-14066-7
	for chisel paste	1	600-28750-1				
	KR=Pump element, adjustable	1	655-26178-1		Power supply board 230 VAC ¹	1	544-36961-4
26	Sealing ring Ø22.2x27x1.5	1	306-17813-1		Arrow: direction of rotation	1	810-55106-1
27	Check valve Ø5 mm, assy.	1	504-36071-8		Lincoln-Logo sticker	1	810-55087-1
	Check valve Ø6 mm, assy.	1	504-36071-4		Jumper for control p.c.b.	1	236-13898-1
	Check valve Ø7 mm, assy.	1	504-36071-9				
28	Nipple S 2520-1/4-1/4-25	1	226-14105-5				

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

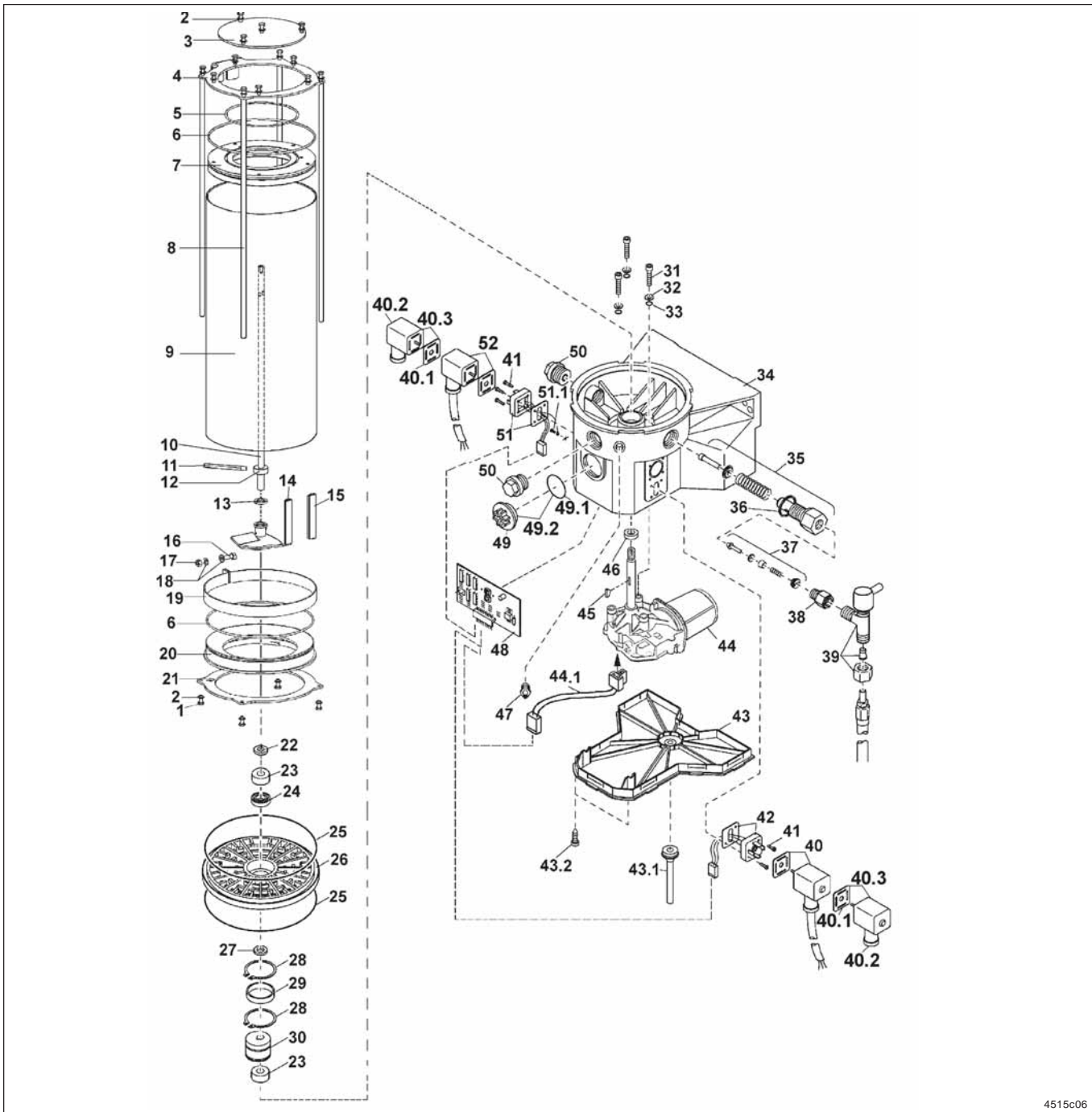
Subject to modifications

15 l reservoir for grease

without low-level control

P.c.b. versions V10 - V13, V20 - V23

connection type 1A1.01/10, 2A1.01/10



4515c06

Fig. 33 - Explosion view for P 203 -15XN-1K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 33

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Hexagon head screw M6x16	17	200-13022-4	37	Check valve Ø 5mm, assy.	1	504-36071-8
2	Washer A 6,4 C	17	209-13011-5		Check valve Ø 6mm, assy.	1	504-36071-4
3	Lid	1	444-71032-1		Check valve Ø 7mm, assy.	1	504-36071-9
4	Mounting plate	1	444-70499-1	38	Nipple S2520-1/4-1/4-25	1	226-14105-5
5	O-ring 72 NBR 135x3,0	1	219-10390-8	39	Pressure relief valve ³		
6	O-ring 72 NBR 200x4,0	2	219-10390-4		SVTE-350-1/4-D6	1	624-28894-1
7	Center bushing	1	444-71003-1	40	Socket 2 grey ^{1,2}		
8	Support collar	4	444-71002-1		with flat packing and 10 m cable	1	664-36078-9
9	Reservoir tube KF for 15 L	1	544-32832-1	40.1	Socket ½, black ^{1,2}	2	236-13277-9
10	Axis	1	444-71006-1	40.2	Flat packing	2	236-13294-3
11	Pin SW 8 for fixed paddle	1	444-71001-1	40.3	Socket incl. flat packing ^{1,2}	2	544-32850-1
12	Regulating ring	1	444-71000-1	41	Screw BZ 3x10 C	8	206-13796-6
13	O-ring 90 AU 12,3x2,4	1	219-12451-1	42	Plug 2 with cable ^{1,2}	1	664-36862-5
14	Stirring paddle,assy.4/8XNBO Polar	1	544-32578-1	43	Housing cover	1	444-24667-1
15	Hose NBR, NW 9,5	1	111-35089-2		Housing cover,assy. since 1996	1	544-32217-1
16	Hexagon head screw A2 M 8x20	1	200-14245-6	43.1	Screw f. KF 3x25	10	206-13796-7
17	Hexagonal nut M8	1	207-12516-5	43.2	Drain hose	1	444-24310-1
18	Washer A2 8,4	2	209-13072-8	44	Motor ^{1,4}		
19	Clamp	1	444-70948-1		with pos. 31, 37, 39, 50.1, 52		
20	Adapting	1	444-70941-1		12 VDC	1	544-36913-6
21	Fixing ring	1	444-70950-1		24 VDC	1	544-36913-7
22	Washer 8,4	1	20913072-6		24 VDC for VAC connection	1	544-36913-8
23	Inner ring	2	444-24168-1	45	Woodruff key 3x5	1	214-13123-1
24	Grooved ball bearing D 10/26x8	1	250-14009-7	46	Rotary shaft seal BA 10x22x7	1	220-12231-3
25	O-ring Ø 142x4	2	219-13730-7	47	Hydraulic lub. fitting AR ¼ Z	1	251-14045-9
26	Intermediate bottom	1	444-24167-1	48	Control p.c.b. 12/24 VDC ¹		
27	Shim 10x16x0,5	1	209-13047-5		Industry – and wind energy plants		
28	Snap ring SW 32	2	211-14100-1		Model V10-V13	1	236-13891-1
29	Pressure ring Ø 33x37x13	1	444-24439-1		Model V20-V23 ²	1	236-13891-2
30	Eccentric	1	444-24170-2		Model H	1	236-13857-1
31	Hexagon socket head screw M6x25 self-tapping ⁴	3	206-13710-8		Model M ¹	1	236-13870-3
32	Washer	3	444-24169-1	49	Sealing plug M33x2	1	233-13124-9
33	O-ring Ø 6x2	3	219-13084-2	49.1	O-ring Ø 31x2	1	219-14138-2
34	Housing	1	444-24666-1	49.2	Sealing plug with O-ring Ø 31x2	1	544-32851-1
	Housing kit, incl. housing cover and tightening screws		544-32191-1	50	Closure plug M 22x1,5x12	2	303-19285-1
35	Pump element with			51	Plug 1 with cable ¹	1	664-36917-9
	K5=piston Ø 5 mm, assy.	1	600-26875-2	51.1	Self-tapping screw 3,9x6,5 C	1	206-13725-7
	K6=piston Ø 6 mm, assy.	1	600-26876-2	52	Socket 1 black with flat packing and 10 m cable ¹	1	664-36078-7
	K7=piston Ø 7 mm, assy.	1	600-26877-2		Power supply board 230 VAC ¹	1	544-36961-4
	KR=Pump element, adjustable	1	655-26178-1		Arrow: direction of rotation	1	810-55106-1
36	Sealing ring Ø 22,2x27x1,5	1	306-17813-1		Lincoln-Logo	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads.

For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

15 l reservoir for grease

with low-level control

P.c.b. versions V10 - V13, V20 - V23

connection type 1A1.01/10, 2A1.01/10

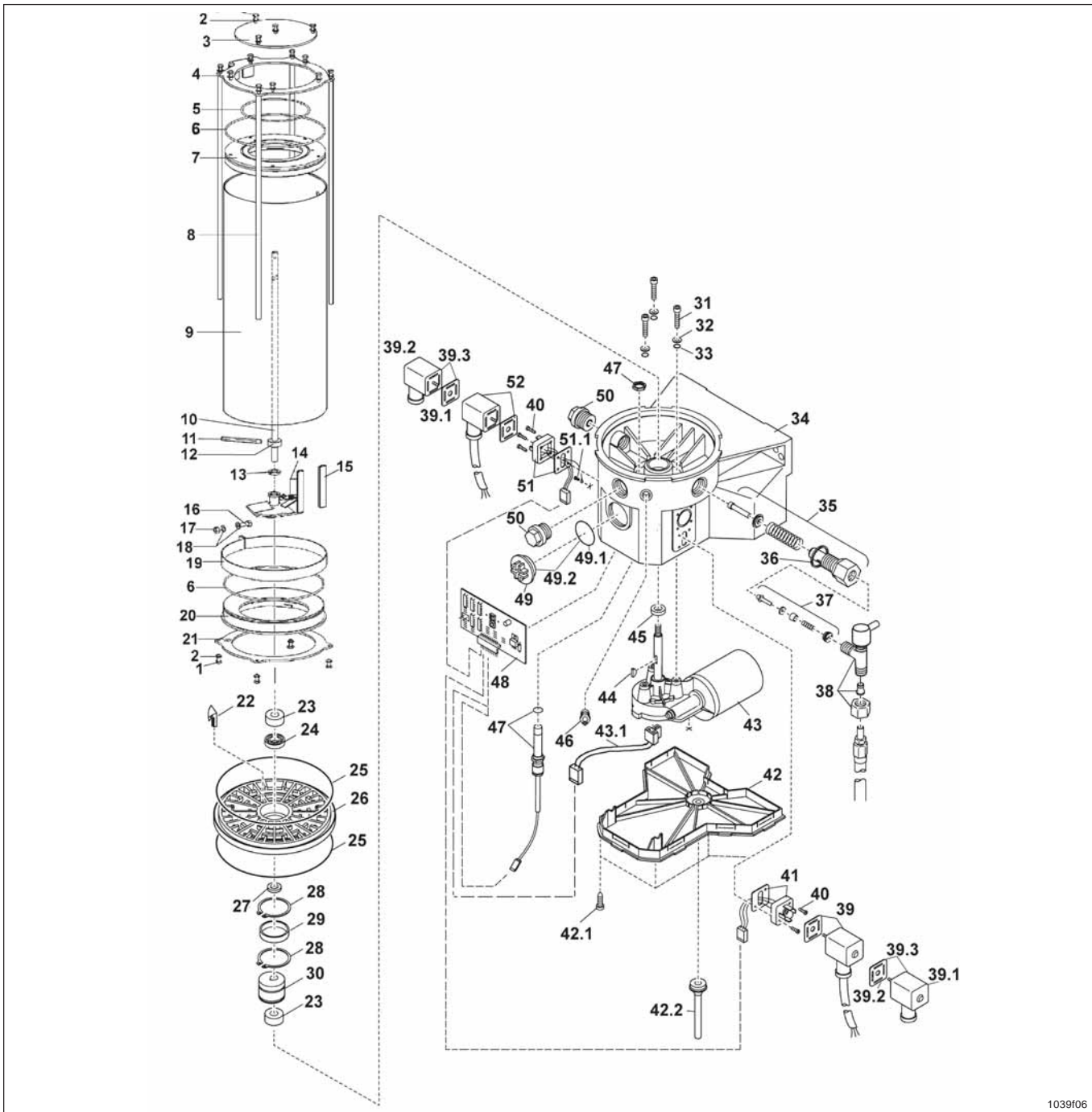


Fig. 34 - Explosion view for P 203 -15XL-1K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 34

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Hexagon head screw M6x16	17	200-13022-4	36	Check valve Ø 5mm, assy.	1	504-36071-8
2	Washer A 6,4 C	17	209-13011-5		Check valve Ø 6mm, assy.	1	504-36071-4
3	Lid	1	444-71032-1		Check valve Ø 7mm, assy.	1	504-36071-9
4	Mounting plate	1	444-70499-1	37	Nipple S2520-1/4-1/4-25	1	226-14105-5
5	O-ring 72 NBR 135x3,0	1	219-10390-8	38	Pressure relief valve ⁴		
6	O-ring 72 NBR 200x4,0	2	219-10390-4		SVTE-350-1/4-D6	1	624-28894-1
7	Center bushing	1	444-71003-1	39	Socket 2 grey with		
8	Support collar	4	444-71002-1		Flat packing and 10 m cable	1	664-36078-9
9	Reservoir tube KF for 15 L	1	544-32832-1	39.1	Socket ½, black ^{1,2}	2	236-13277-9
10	Axis	1	444-71006-1	39.2	Flat packing	2	236-13294-3
11	Pin SW 8 for fixed paddle	1	444-71001-1	39.3	Socket incl. flat packing ^{1,2}	2	544-32850-1
12	Regulating ring	1	444-71000-1	40	Screw BZ 3x10 C	8	206-13796-6
13	Stirring paddle,assy.4/8XNBO Polar	1	544-32821-1	41	Plug 2 with cable ^{1,2}	1	664-36862-5
14	Hose NBR, NW 9,5	1	111-35089-2	42	Housing cover	1	444-24667-1
15	Hexagon head screw A2 M 8x20	1	200-14245-6		Housing cover, assy. since 1996	1	544-32217-1
16	Hexagonal nut M8	1	207-12516-5	42.1	Screw f. KF 3x25	10	206-13796-7
17	Washer A2 8,4	2	209-13072-8	42.2	Drain hose	1	444-24310-1
18	Clamp	1	444-70948-1	43	Motor ^{1,5}		
19	Adapting	1	444-70941-1		with pos. 31, 37, 39, 50.1, 52		
20	Fixing ring	1	444-70950-1		12 VDC	1	544-36913-6
21	Control cam	1	444-24212-1		24 VDC	1	544-36913-7
22	Inner ring	2	444-24168-1		24 VDC for VAC connection ¹	1	544-36913-8
23	Grooved ball bearing D 10/26x8	1	250-14009-7	44	Woodruff key 3x5	1	214-13123-1
24	O-ring Ø 142x4	2	219-13730-7	45	Rotary shaft seal BA 10x22x7	1	220-12231-3
25	Intermediate bottom	1	444-24167-1	46	Hydraulic lub. fitting AR ¼ Z	1	251-14045-9
26	Shim 10x16x0,5	1	209-13047-5	47	Solenoid switch for low-level control	1	234-13162-4
27	Snap ring SW 32	2	211-14100-1	48	Control p.c.b. 12/24 VDC ¹		
28	Pressure ring Ø 33x37x13	1	444-24439-1		Industry – and wind energy plants		
29	Eccentric	1	444-24170-2		Model V10-V13	1	236-13891-1
30	Hexagon socket head screw M6x25 self-tapping ⁵	3	206-13710-8		Model V20-V23 ²	1	236-13891-2
31	Washer	3	444-24169-1		Model H	1	236-13857-1
32	O-ring Ø 6x2	3	219-13084-2	49	Model M	1	236-13870-3
33	Housing	1	444-24666-1	49.1	Sealing plug M33x2	1	233-13124-9
	Housing kit, incl. housing cover and tightening screws		544-32191-1	49.2	O-ring Ø 31x2	1	219-14138-2
34	Pump element with			50	Sealing plug with O-ring Ø 31x2	1	544-32851-1
	K5=piston Ø 5 mm, assy.	1	600-26875-2	51	Closure plug M 22x1,5x12	2	303-19285-1
	K6=piston Ø 6 mm, assy.	1	600-26876-2	51.1	Plug 1 with cable ¹	1	664-36917-9
	K7=piston Ø 7 mm, assy.	1	600-26877-2	52	Self-tapping screw 3,9x6,5 C	1	206-13725-7
	KR=Pump element, adjustable	1	655-26178-1		Socket 1 black ¹ with flat packing and 10 m cable	1	664-36078-7
35	Sealing ring Ø 22,2x27x1,5	1	306-17813-1		Power supply board 230 VAC ¹	1	544-36961-4
					Arrow: direction of rotation	1	810-55106-1
					Lincoln-Logo	1	810-55087-1
					Jumper for control p.c.b.	1	236-13898-1

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads. For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

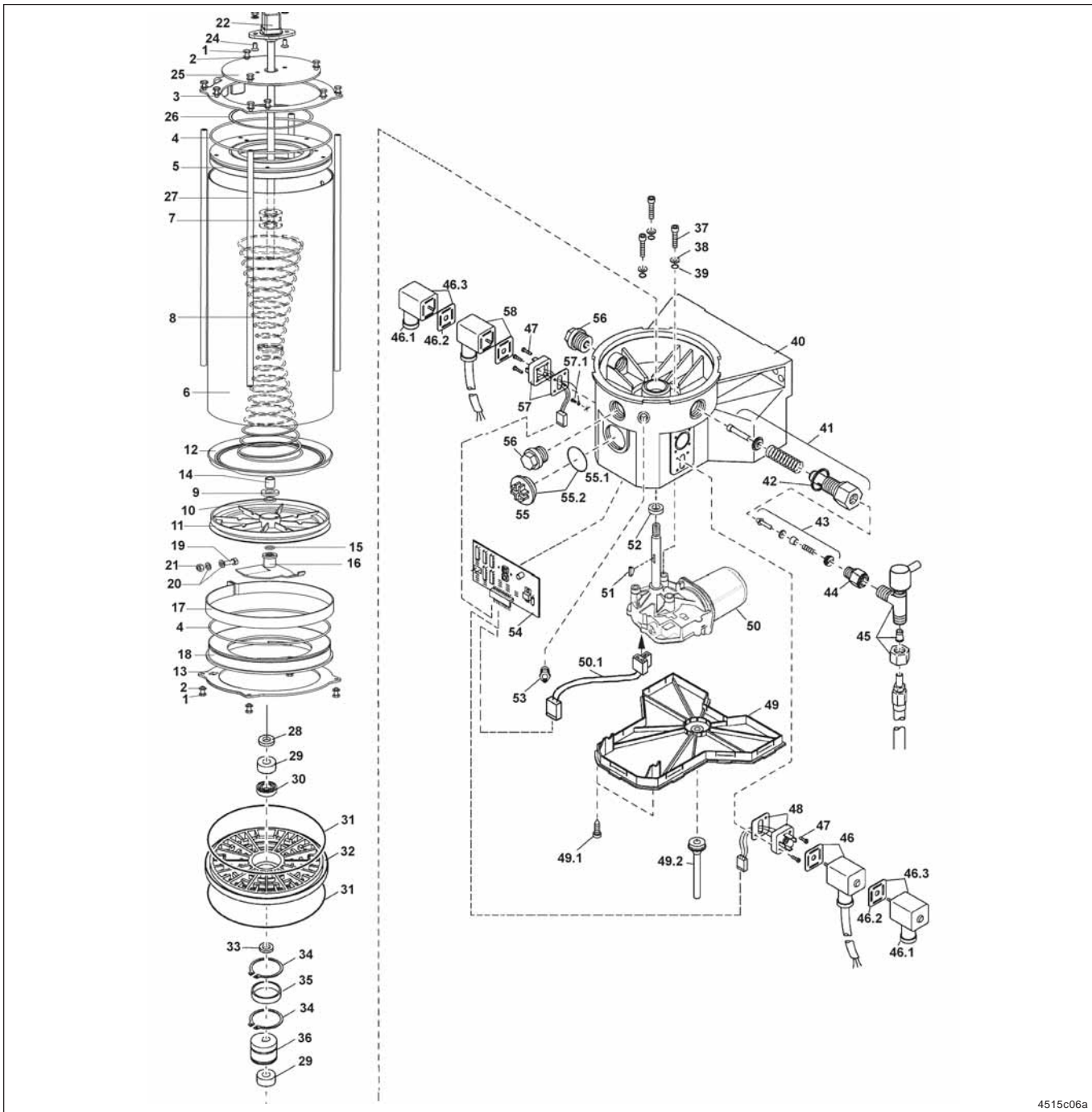
Subject to modifications

15 l reservoir for grease

with follower plate and low-level control

P.c.b. versions V10 - V13, V20 - V23

connection type 1A1.01/10, 2A1.01/10



4515c06a

Fig. 35 - Explosion view for P 203 -15XBF-1K.-12/24-1/2A1.01/10-V...

Parts List acc. to Fig. 35

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Hexagon head screw M6x16	16	200-13022-4	40	Housing	1	444-24666-1
2	Washer A 6,4 C	16	209-13011-5		Housing kit, incl. housing cover and		
3	Mounting plate	1	444-70499-1		tightening screws		544-32191-1
4	O-ring 72 NBR 200x4,0	2	219-10390-4	41	Pump element with		
5	Center bushing	1	444-71003-1		K5=piston Ø 5 mm, assy.	1	600-26875-2
6	Reservoir tube for 15 L	1	544-32832-1		K6=piston Ø 6 mm, assy.	1	600-26876-2
7	Guide sleeve	1	444-71019-1		K7=piston Ø 7 mm, assy.	1	600-26877-2
8	Spring DF6 DR 111x3,5x56 BI KON	1	300-16155-1		KR=Pump element, adjustable	1	655-26178-1
9	Magnet D 30xD16,5x5R6	1	234-13111-4	42	Sealing ring Ø 22,2x27x1,5	1	306-17813-1
10	Wiping seal AS 88 NBR 12x20x4x6	1	220-12239-6	43	Check valve Ø 5mm, kpl.	1	504-36071-8
11	Follower piston 4,8xF	1	444-70115-1		Check valve Ø 6mm, kpl.	1	504-36071-4
12	Grooved ring 4/8/15XBF(NBR)	1	444-71176-1		Check valve Ø 7mm, kpl.	1	504-36071-9
13	Fixing ring	1	444-70950-1	44	Nipple S2520-1/4-1/4-25	1	226-14105-5
14	Bearing bushing SBZ D12/16x25	1	250-14066-7	45	Pressure relief valve ³		
15	O-ring 90 AU 12,3x 2,4	1	219-12451-1		SVTE-350-1/4-D6	1	624-28894-1
16	Stirring paddle, assy.	1	544-32343-1	46	Socket 2 grey ^{1,2} with		
17	Clamp	1	444-70948-1		flat packing and 10 m cable	1	664-36078-9
18	Adapterring	1	444-70941-1	46.1	Socket ½, black ^{1,2}	2	236-13277-9
19	Hexagon head screw A2 M8x20	1	200-14245-6	46.2	Flat packing	2	236-13294-3
20	Washer A2 8,4	1	209-13072-8	46.3	Socket incl. Socket ^{1,2}	2	544-32850-1
21	Hexagonal nut A2, M8	1	207-12516-5	47	Screw BZ 3x10 C	8	206-13796-6
22	Switch rod L1=57; L2=484 522LG ZG	1	234-13191-5	48	Plug2 with cable ^{1,2}	1	664-36862-5
23	Cap nut 6 M6C	2	207-12247-2	49	Housing cover	1	444-24667-1
24	Hexagon socket head screw 8.8 M6x16 C	2	202-12049-5	50	Housing cover, assy. since 1996	1	544-32217-1
25	Lid	1	444-71175-1		Motor ^{1,4}		
26	O-ring 72 NBR 135x3,0	1	219-10380-8		with pos. 31, 37, 39, 50.1, 52		
27	Support collar	4	444-71002-1		12 VDC	1	544-36913-6
28	Washer 8,4	1	209-13072-6		24 VDC	1	544-36913-7
29	Inner ring	2	444-24168-1		24 VDC for VAC connection	1	544-36913-8
30	Grooved ball bearing D 10/26x8	1	250-14009-7	51	Woodruff key 3x5	1	214-13123-1
31	O-ring Ø 142x4	2	219-13730-7	52	Rotary shaft seal BA 10x22x7	1	220-12231-3
32	Intermediate bottom	1	444-24167-1	53	Hydraulic lub. fitting AR ¼ Z	1	251-14045-9
33	Shim 10x16x0,5	1	209-13047-5	54	Control p.c.b. 12/24 VDC ¹		
34	Snap ring SW 32	2	211-14100-1		Industry – and wind energy plants		
35	Pressure ring Ø 33x37x13	1	444-24439-1		Model V10-V13	1	236-13891-1
36	Eccentric	1	444-24170-2		Model V20-V23 ²	1	236-13891-2
37	Hexagon socket head screw M6x25 self-tapping ⁴	3	206-13710-8		Model H	1	236-13857-1
38	Washer	3	444-24169-1		Model M ¹	1	236-13870-3
39	O-ring Ø 6x2	3	219-13084-2	55	Sealing plug M33x2	1	233-13124-9
				55.1	O-ring Ø 31x2	1	219-14138-2
				55.2	Sealing plug with O-ring Ø 31x2	1	544-32851-1
				56	Closure plug M 22x1,5x12	2	303-19285-1
				57	Plug 1 with cable ¹	1	664-36917-9
				57.1	Self-tapping screw 3,9x6,5 C	1	206-13725-7

¹ deviations of the shown connection type of pump 203, see pages 80-88

² control p.c.b. for separate power supply 30, 15 and 31

³ other pressure relief valves, see Parts Catalog

⁴ Motor housings have no fastening threads. For fastening purposes use the self-tapping hexagonal socket head screws included in the kit.

Subject to modifications

Power supply board 230 VAC¹ 1 544-36961-4

Drehrichtungspfeil, Aufkleber 1 810-55106-1

Lincoln-Logo 1 810-55087-1

Jumper for control p.c.b. 1 236-13898-1

Different connection types for 12/24 VDC

Connection types 1A8.00 / 2A8.00 for special applications

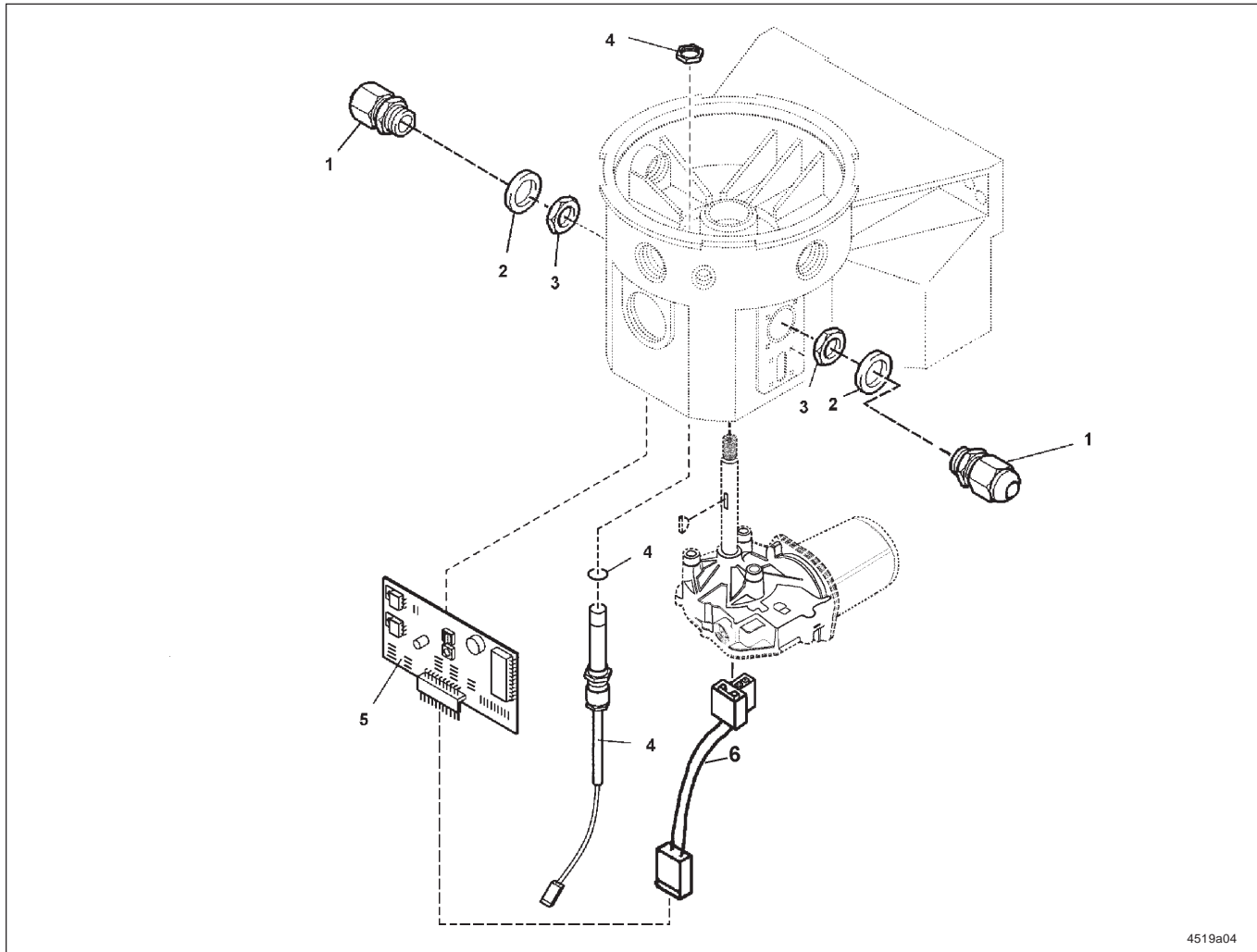


Fig. 36 - Different connection types 1A8.00/2A8.00

4519a04

Parts List acc. to Fig. 36

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Cable gland KF, PG 9	2	237-13397-3	4	Magnetic switch for low-level control	1	234-13162-5
2	Sealing ring ABIL 15.2x19.5x0.5	2	306-19549-1	5	Control p.c.b. ^{1, 2}	1	236-13870-3
3	Jam nut KF PG 9	2	237-13352-8	6	Motor connecting cable, new	1	664-34195-2

¹ control p.c.b. M00 - M07

² control p.c.b. M08 - M23

Different connection types for 12/24 VDC

Connection types 2A4.12 / 2A4.13 with microprocessor p.c.b. M... and AMP plug

Note: The components of model 203 are listed with the respective preceding component drawings. For the microprocessor control, the parts mentioned below are different from those of the standard version.

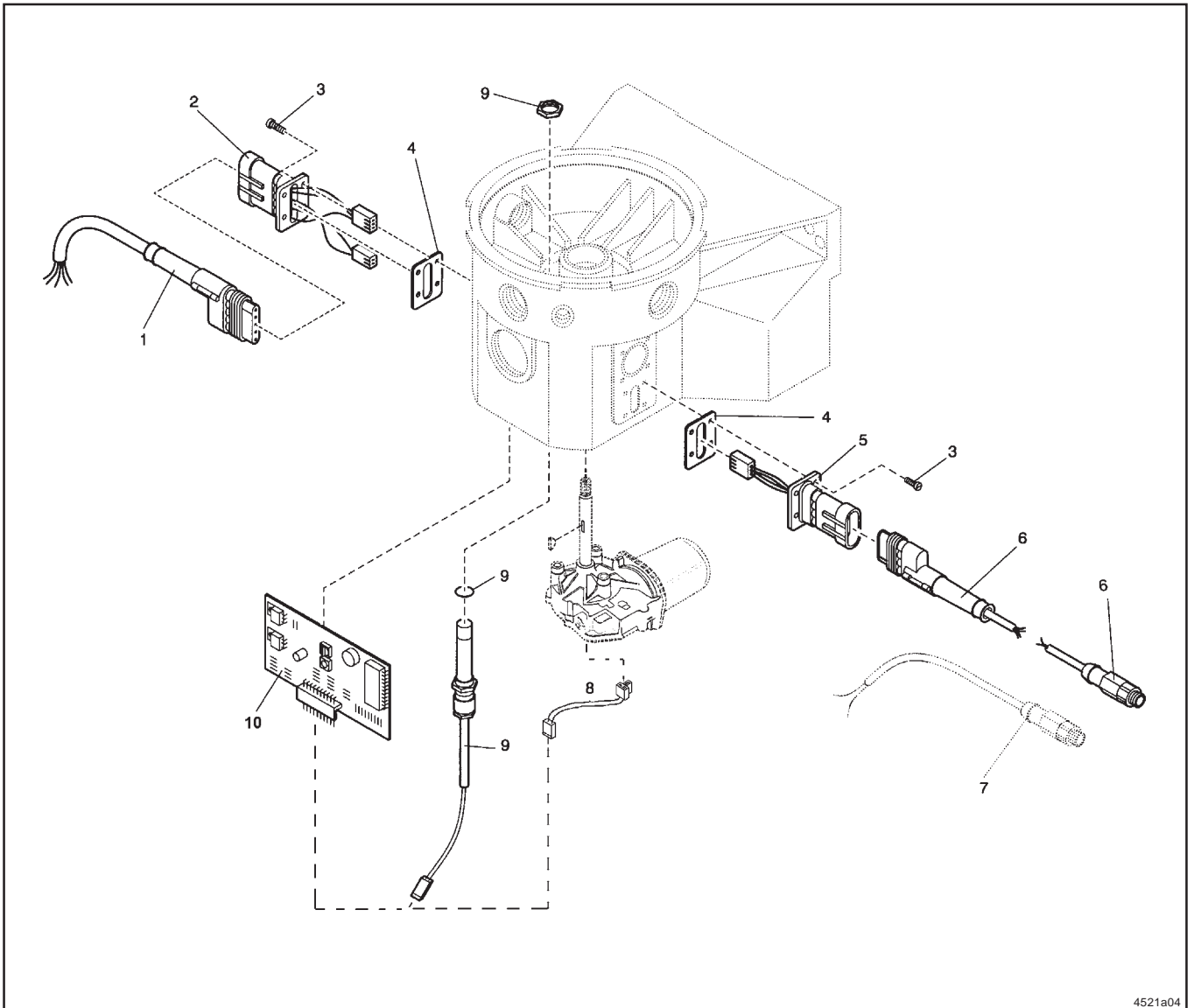


Fig. 37 - Different type of connection 2A4.12/2A4.13

Parts List acc. to Fig. 37

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Connecting cable, 4-core ¹	1	664-36844-8	5	Flanged plug, 4-pole	1	664-36884-1
	Connecting cable, 5-core ²	1	664-36884-8	6	Piston detector with plug (M11)	1	234-13178-2
2	Flanged plug, 5-pole	1	664-36884-2	7	Piston detector		
3	Screw BZ 3x10 C	8	206-13796-6		without plug (M11)	1	234-13178-1
4	Flat packing 35x27x1	2	306-19562-1	8	Motor connection ³	1	664-34195-2
				9	Magnetic switch		
					for low-level control	1	234-13162-4
				10	Control p.c.b. ^{1, 2}	1	236-13870-3

¹ control p.c.b. M00- M07

² control p.c.b. M08- M23

³ included in motor kit

Subject to modifications

Different connection types for 12/24 VDC

Connection types 2A9.12 / 2A9.13 with microprocessor p.c.b. M... and AMP plug, wire to wire

Note: The components of model 203 are listed with the respective preceding component drawings. For the microprocessor control, the parts mentioned below are different from those of the standard version.

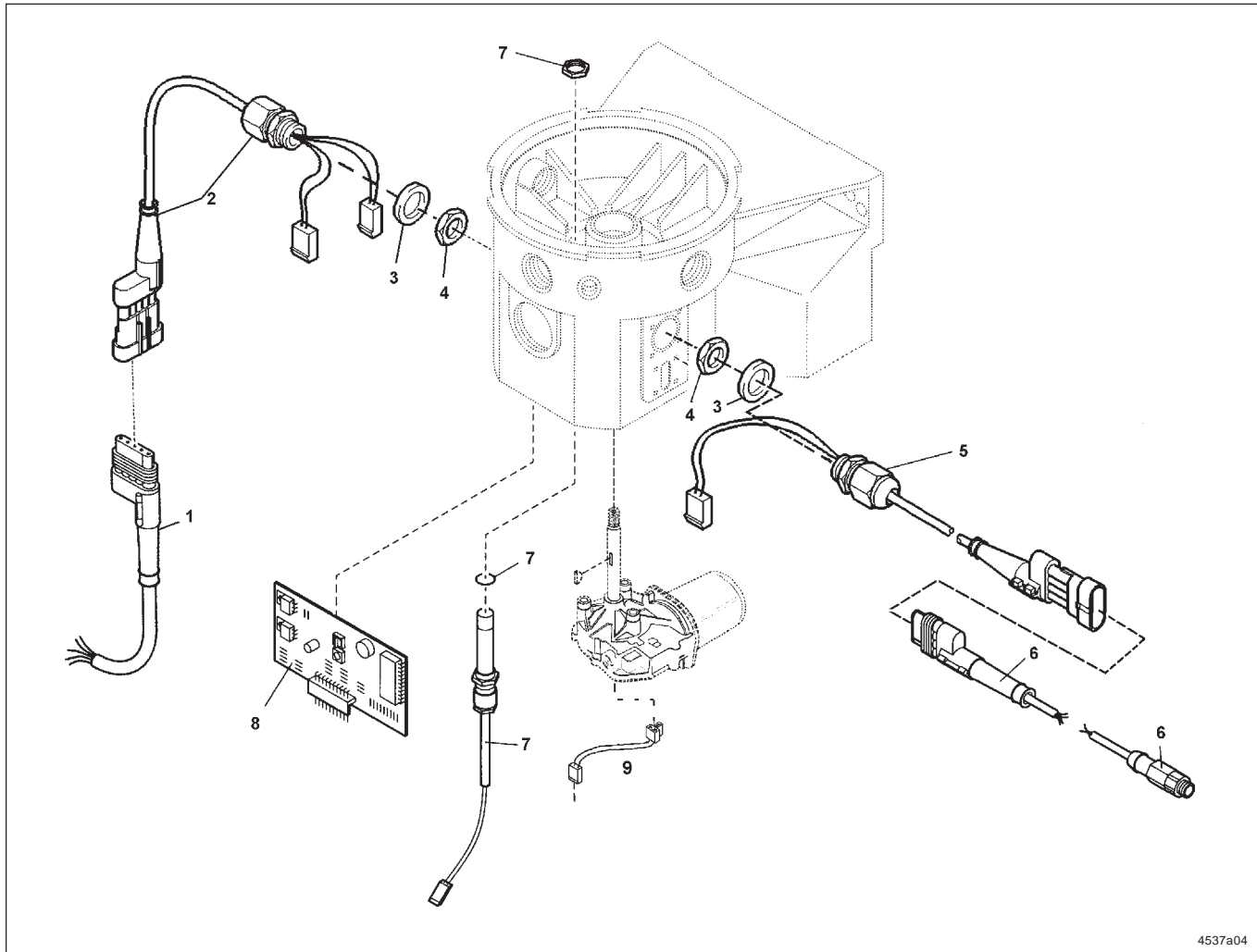


Fig. 38 - Different connection types 2A9.12/2A9.13

Parts List acc. to Fig. 38

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Connecting cable, 4-core ¹	1	664-36844-8	5	Cable assy. 4-core, 0.94 m ³	1	664-36931-1
	Connecting cable, 5-core ²	1	664-36884-8	6	Piston detector with plug (M11x1)	1	234-13178-2
2	Cable assy. 5 adrig, 0,94 m ³	1	664-36931-2		Piston detector without plug (M11x1)	1	234-13178-1
3	Sealing ring ABIL 15.2x19.5x0.5	2	306-19549-1	7	Magnetic switch for low-level control	1	234-13162-4
4	Jam nut KF PG 9	2	237-13352-8	8	Control p.c.b. ^{1, 2}	1	236-13870-3
				9	Motor connection ⁴	1	664-34195-2

¹ control p.c.b. M00 - M07

² control p.c.b. M08 - M23

³ length of cable assy.: 0.8 m from cable gland to end of plug

⁴ included in motor kit

Different connecting parts for 12/24 VDC

Connection type 2A6.15 with microprocessor p.c.b. M... and bayonet plug

Note: The components of model 203 are listed with the respective preceding component drawings. For the microprocessor control, the parts mentioned below are different from those of the standard version.

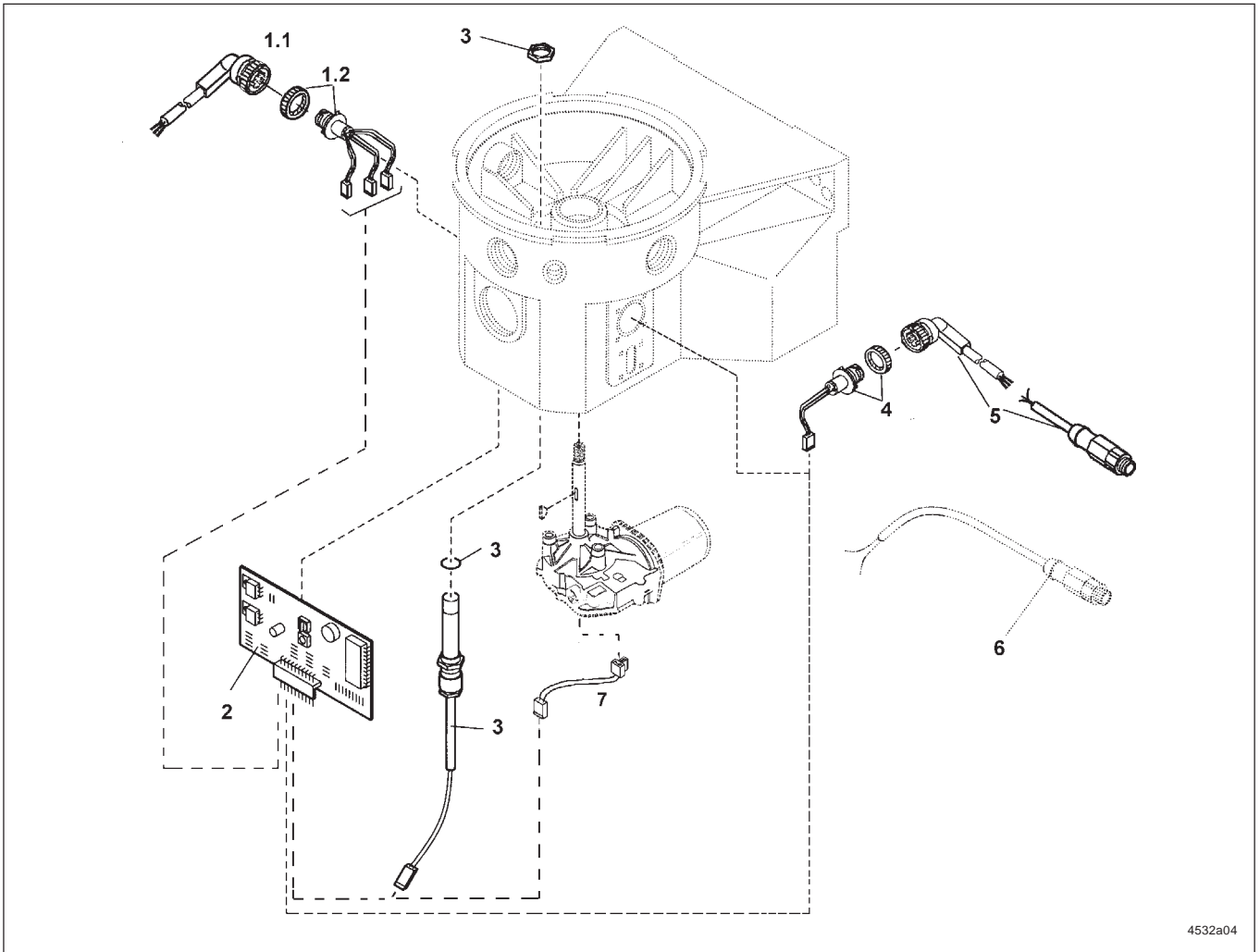


Fig. 39 - Different connection types 2A6.15

Parts List acc. to Fig. 39

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1.1	Connecting cable, 7/5 adrig	1	664-34167-2	5	Piston detector with plug (M11x1)	1	234-13188-2
1.2	Connecting cable, 7/5 polig	1	664-34167-1	6	Piston detector without plug (M11x1)	1	234-13178-1
2	Control p.c.b. ¹	1	236-13870-3	7	Motor connecting cable, new ²	1	664-34195-2
3	Magnetic switch for low-level control	1	234-13162-4				
4	Connecting plug, 4/4-pole	1	664-34041-9				

¹ control p.c.b. M08 - M23

² included in motor kit

Subject to modifications

Different connecting parts for 120 and 230 VAC

Connection types 1A1.01 / 2A1.01 with power supply p.c.b., without control p.c.b. (if upgrading motor from old to new)

Note: The components of model 203 are listed with the respective preceding component drawings. For industrial applications the parts mentioned below are different from those of the standard version. Pumps with new motor are marked with version code „M“ on identification plate.

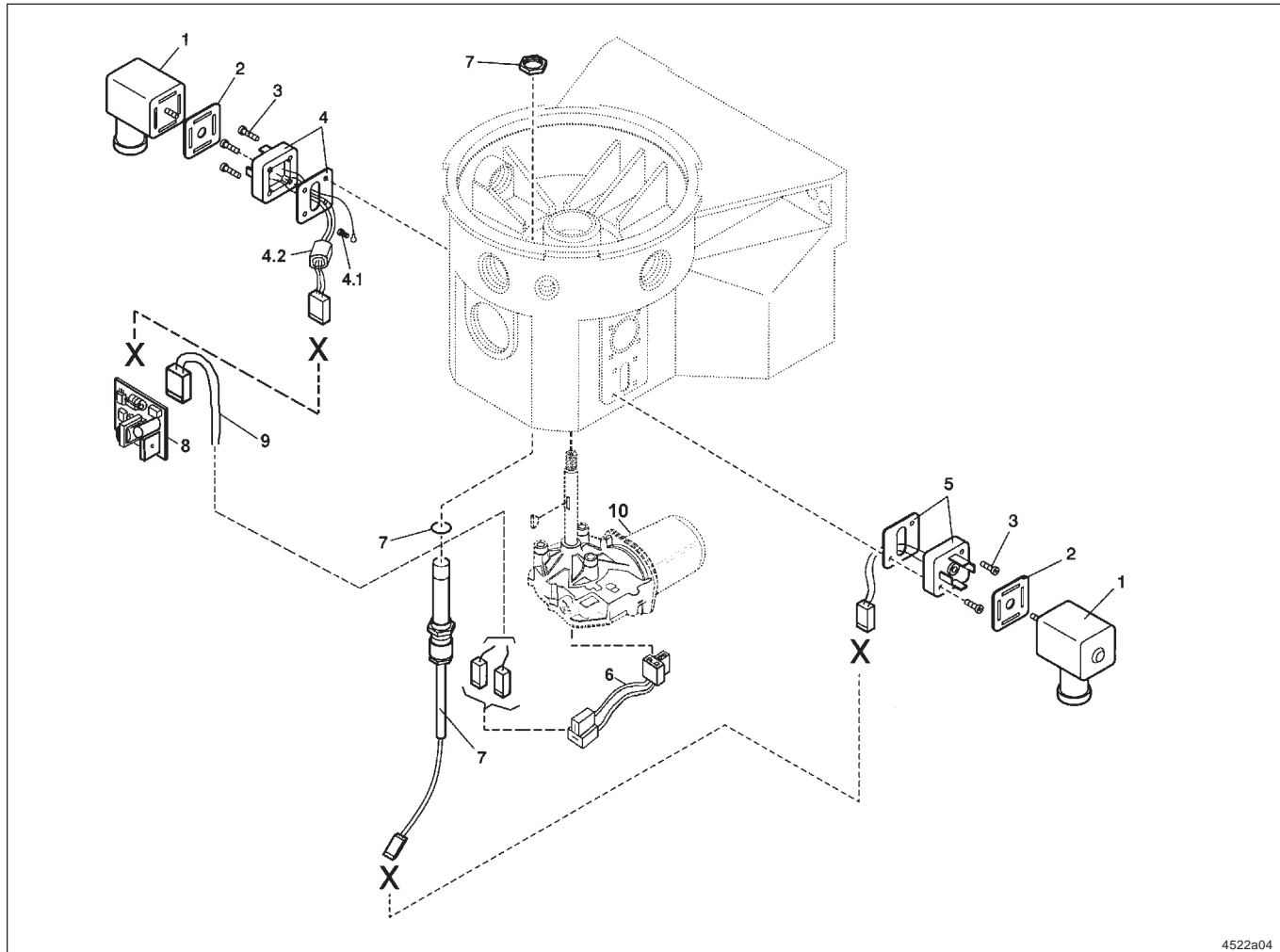


Fig. 40 - Different connection types 1A1.01/2A1.01 with power supply p.c.b. for 120 and 230 VAC

Parts List acc. to Fig. 40

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Socket (black)	2	236-13277-9	4.2	Ferrite core	1	236-13829-4
2	Flat packing	2	236-13294-3	5	Appliance plug 2 with cable	1	664-36862-5
3	Screw BZ 3x10 C	4	206-13796-6	6	Adapter cable ¹	1	664-34195-8
4	Appliance plug 1 with cable and ferrite core	1	664-36917-5	7	Magnetic switch for low-level control	1	234-13162-5
4.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7	8	Power supply board 110 - 230 VAC	1	544-36961-4
				9	Motor connecting cable ¹	1	664-36917-6
				10	Motor, new 24 VDC	1	544-36913-8

¹ included in the motor kit

Different connecting parts for 120 and 230 VAC

Connection types 1A1.01 / 2A1.01 with power supply p.c.b., without control p.c.b. (in case of replacement of motor)

Note: The components of model 203 are listed with the respective preceding component drawings. For industrial applications the parts mentioned below are different from those of the standard version. Pumps with new motor are marked with version code „M“ on identification plate.

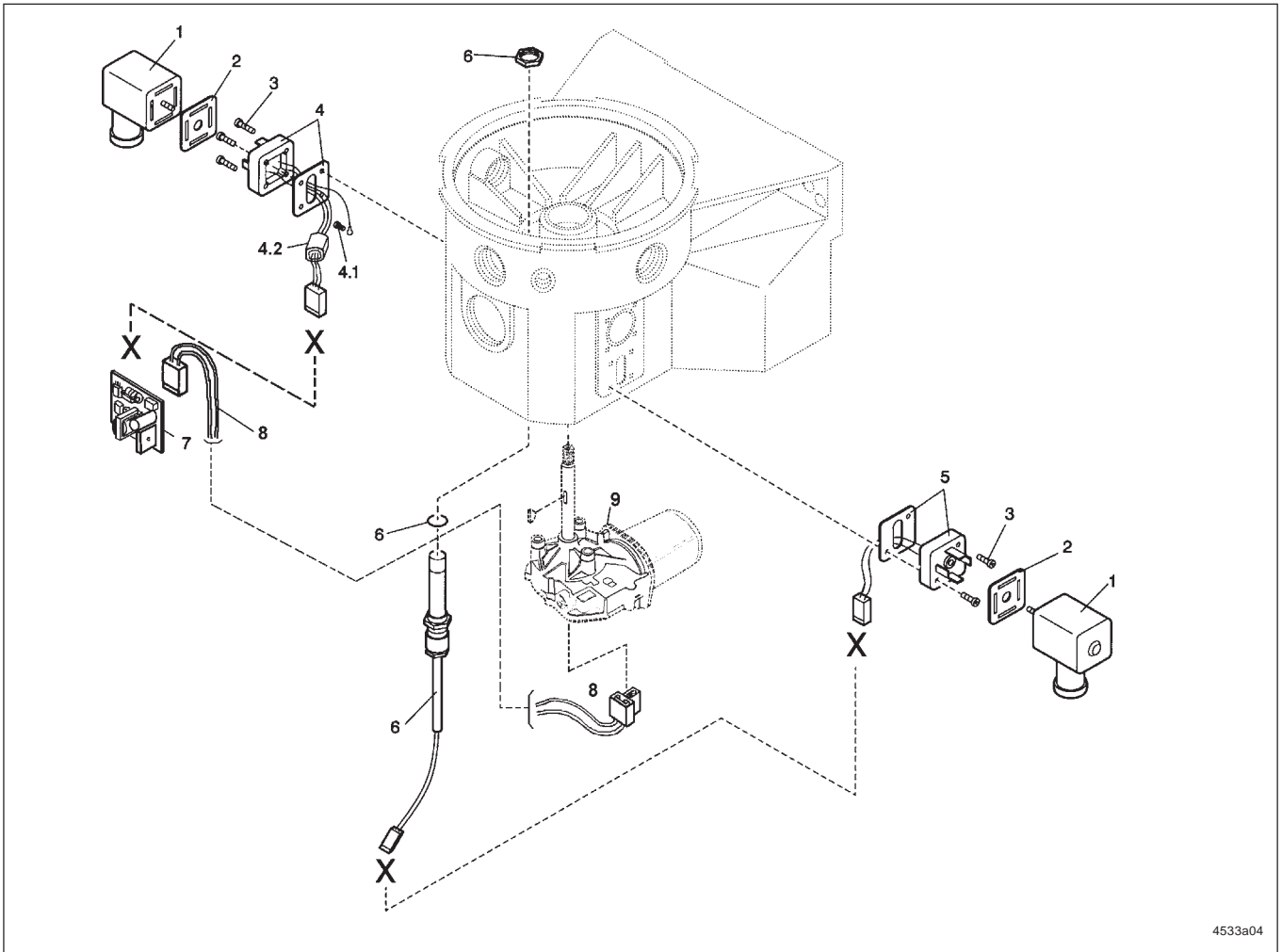


Fig. 41 - Different connection types 1A1.01/2A1.01 with power supply p.c.b. for 120 and 230 VAC

Parts List acc. to Fig. 41

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Socket (black)	2	236-13277-9	4.2	Ferrite core	1	236-13829-4
2	Flat packing	2	236-13294-3	5	Appliance plug 2 with cables	1	664-36862-5
3	Screw BZ 3x10 C	4	206-13796-6	6	Magnetic switch		
4	Appliance plug 1 with cable and ferrite core	1	664-36917-5		for low-level control	1	234-13162-5
4.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7	7	Power supply board 110 - 230 VAC	1	544-36961-4
				8	Motor connecting cable ¹	1	664-34195-2
				9	Motor , new 24 VDC	1	544-36913-8

¹ included in the motor kit

Subject to modifications

Different connection types for 120 and 230 VAC

Connection types 1A1.01/2A1.01 with power supply p.c.b. and control p.c.b.s V10 - V13

Note: The components of model 203 are listed with the respective preceding component drawings. For industrial applications the parts mentioned below are different from those of the standard version. Pumps with new motor are marked with version code „M“ on identification plate.

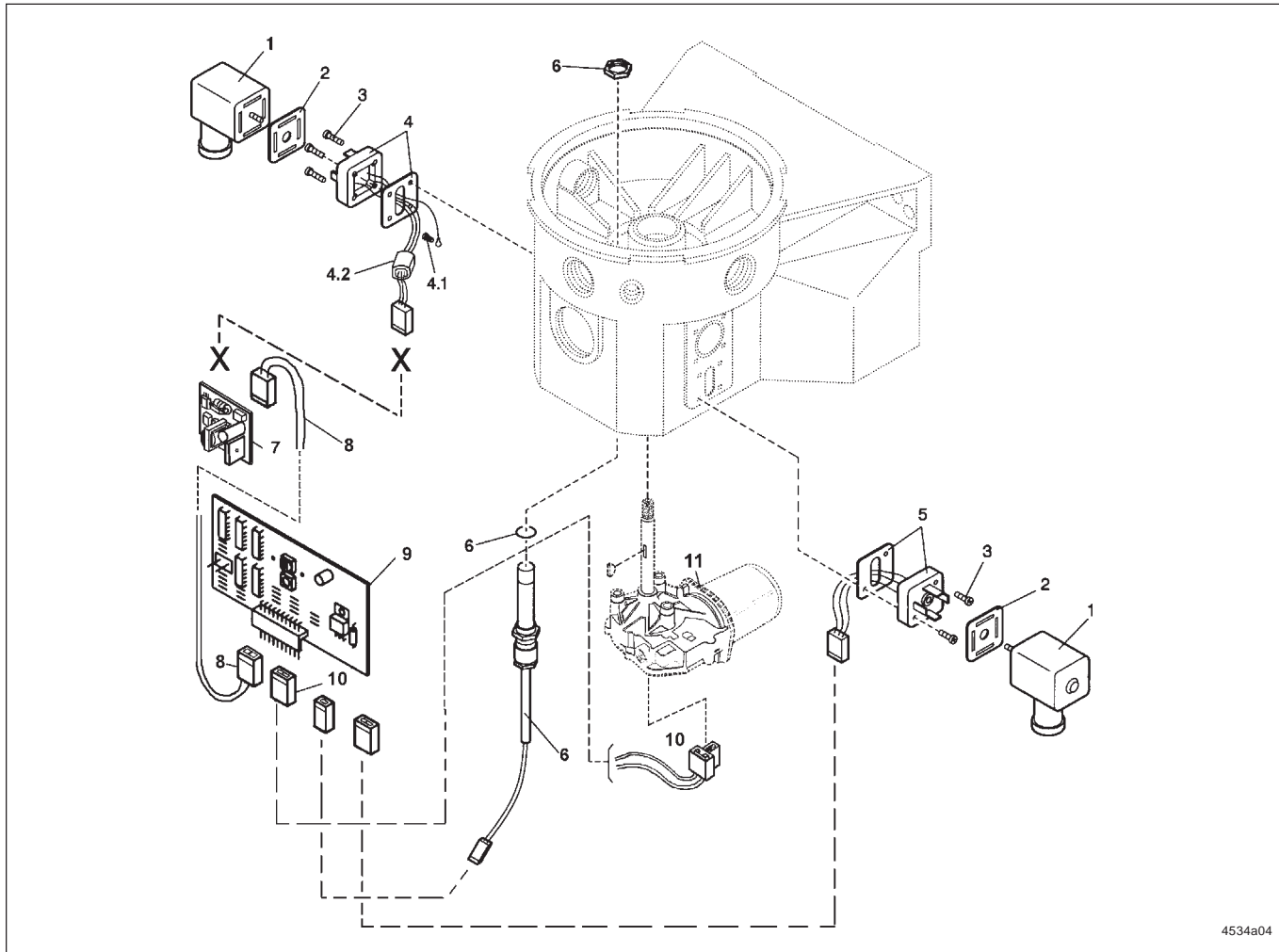


Fig. 42 - Different connection types 1A1.01/2A1.01 with power supply p.c.b. for 120 and 230 VAC and control p.c.b. V10-V13

Parts List acc. to Fig. 42

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Socket (black)	2	236-13277-9	5	Appliance plug 2 with cable	1	664-36862-5
2	Flat packing	2	236-13294-3	6	Magnetic switch for low-level control	1	234-13162-4
3	Screw BZ 3x10 C	8	206-13796-6	7	Power supply board 110-230 VAC	1	544-36961-4
4	Appliance plug 1 with cable and ferrite core	1	664-36917-5	8	Connection: power supply - Control p.c.b.	1	664-36917-7
4.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7	9	Control p.c.b. V 10- V 13	1	236-13891-1
4.2	Ferrite core	1	236-13829-4	10	Motor connecting cable, old Motor connecting cable, new ¹	1 1	664-36862-3 664-34195-2
				11	Motor , new 24 VDC	1	544-36913-8

¹ included in motor kit

Different connection types for 120 and 230 VAC

Connection type 2A7.16 with power supply p.c.b. and control p.c.b. V10 - V13

Note: The components of model 203 are listed with the respective preceding component drawings. For industrial applications the parts mentioned below are different from those of the standard version. Pumps with new motor are marked with version code „M“ on identification plate.

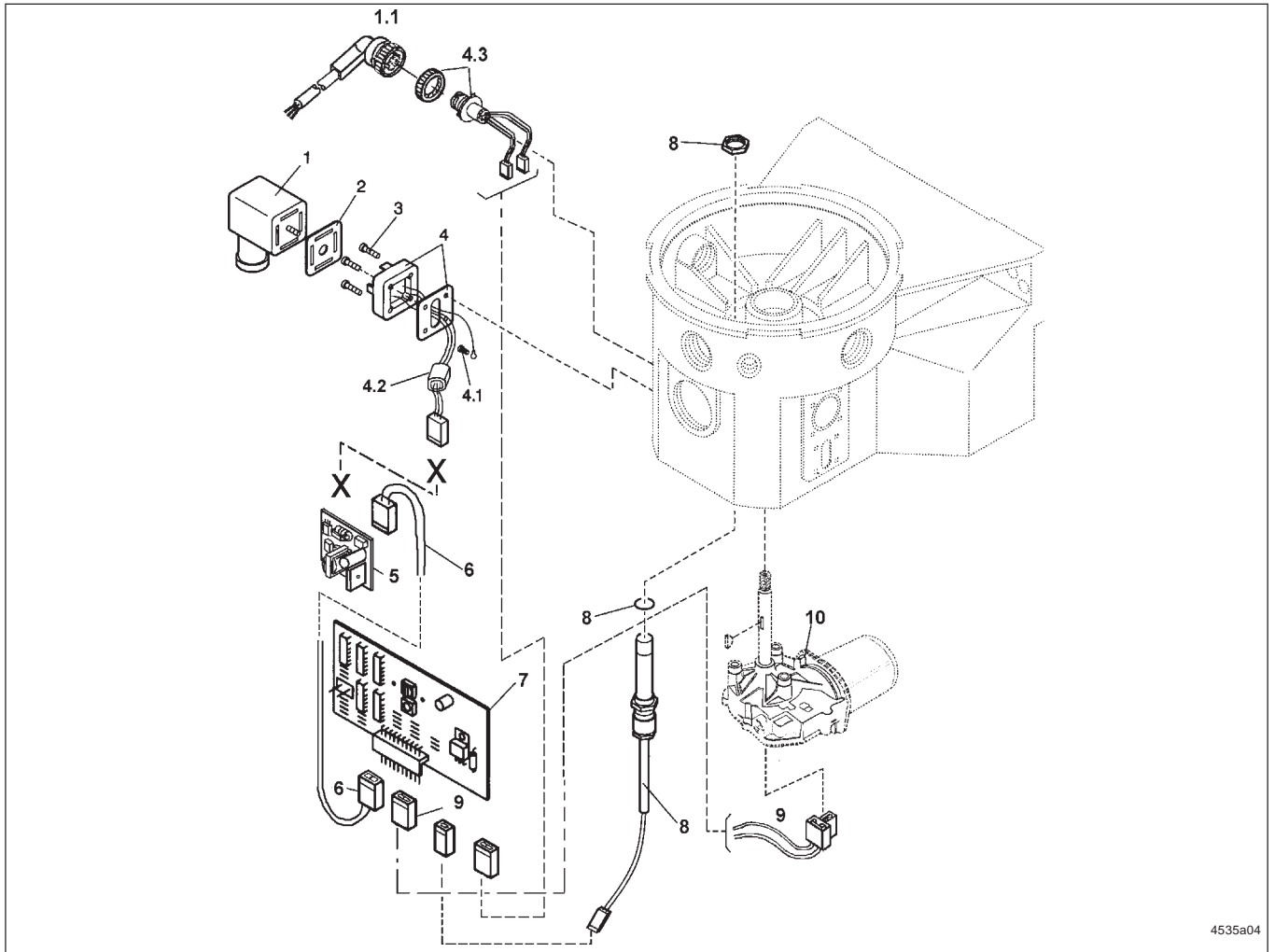


Fig. 43 - Different connection types 2A7.16 with power supply p.c.b. for 120 and 230 VAC and control p.c.b. V10-V13

Parts List acc. to Fig. 43

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Socket (black)	2	236-13277-9	4.3	Bayonet plug 7/6-pole	1	664-34167-3
1.1	Bayonet cable 7/6-core	1	664-34167-5	5	Power supply board 110-230 VAC	1	544-36961-4
2	Flat packing	2	236-13294-3	6	Connection:		
3	Screw BZ 3x10 C	4	206-13796-6		power supply - control p.c.b.	1	664-36917-7
4	Appliance plug 1 with cable and ferrite core	1	664-36917-5	7	Control p.c.b. V 10- V 13	1	236-13891-1
4.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7		Control p.c.b. V 20- V 23	1	236-13891-2
4.2	Ferrite core	1	236-13829-4	8	Magnetic switch for low-level control	1	234-13162-4
				9	Motor connecting cable, old	1	664-36862-3
					Motor connecting cable, new ¹	1	664-34195-2
				10	Motor, new 24 VDC	1	544-36913-8

¹ included in motor kit

Subject to modifications

Different connection types for 120 and 230 VAC

Connection types 3A6.15 with power supply p.c.b. and control p.c.b. M08-M23

Note: The components of model 203 are listed with the respective preceding component drawings. For industrial applications the parts mentioned below are different from those of the standard version. Pumps with new motor are marked with version code „M“ on identification plate.

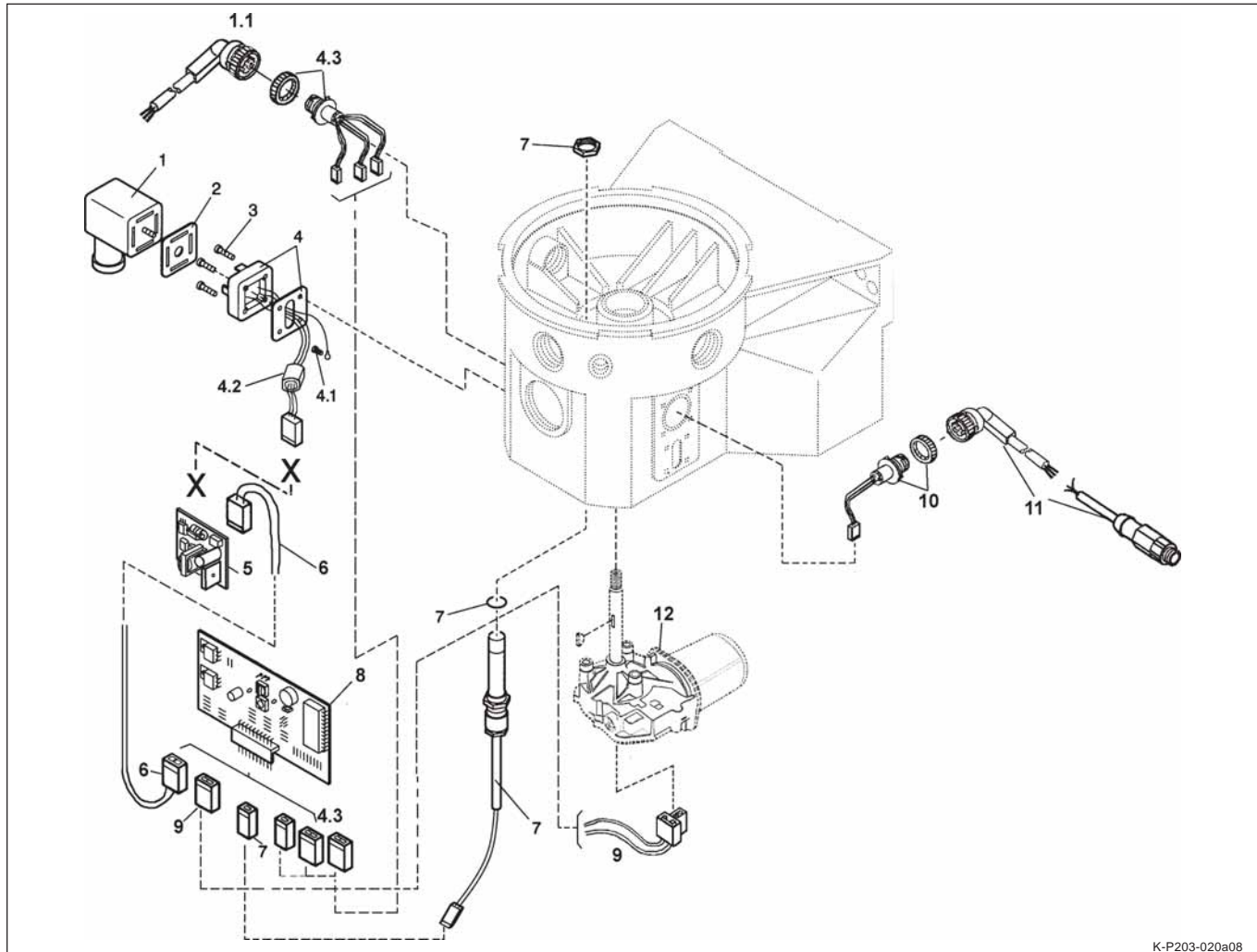


Fig. 44 - Different connection types 3A6.15 with power supply p.c.b. and control p.c.b. M08-M23

K-P203-020a08

Parts List acc. to Fig. 44

Pos.	Designation	Qty.	Part no.	Pos.	Designation	Qty.	Part no.
1	Socket (black)	1	236-13277-9	5	Power supply board 110-230 VAC	1	544-36961-4
1.1	Bayonet cable 7/5-core	1	664-34167-2	6	Connection: power supply - control p.c.b.	1	664-36917-7
2	Flat packing	1	236-13294-3	7	Magnetic switch for low-level control	1	234-13162-4
3	Screw BZ 3x10 C	4	206-13796-6	8	Control p.c.b. M08 - M23	1	236-13870-3
4	Appliance plug 1 with cable and ferrite core	1	664-36917-5	9	Motor connecting cable, old	1	664-36862-3
4.1	Self-tapping screw 3.9x6.5 C	1	206-13725-7		Motor connecting cable, new ¹	1	664-34195-2
4.2	Ferrite core	1	236-13829-4	10	Bayonet plug, 4/4-pole	1	664-34041-9
4.3	Bayonet plug, 7/5-pole	1	664-34167-1	11	Piston detector	1	234-13188-2
				12	Motor, new 24 VDC	1	544-36913-8

¹ included in motor kit

Model 203

Parts of the lockable lid for 4-l and 8-l reservoir

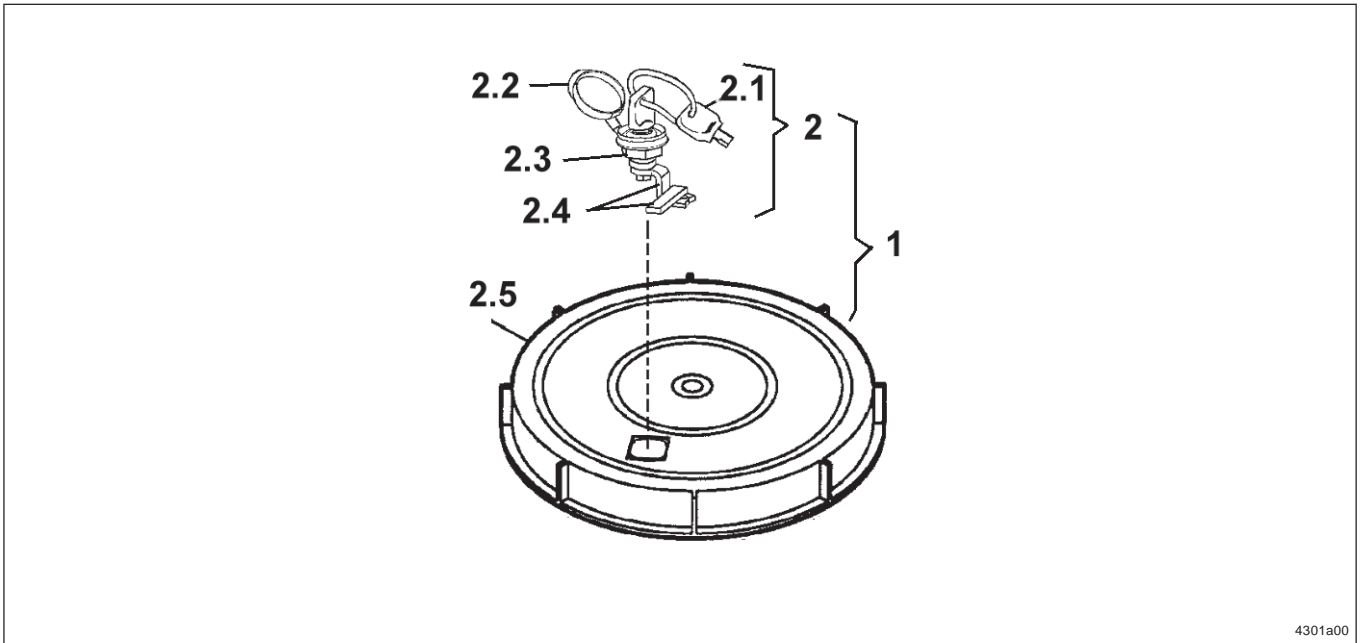


Fig. 45 - Lid for P 203 -4XN/LBO/8XN/LBO

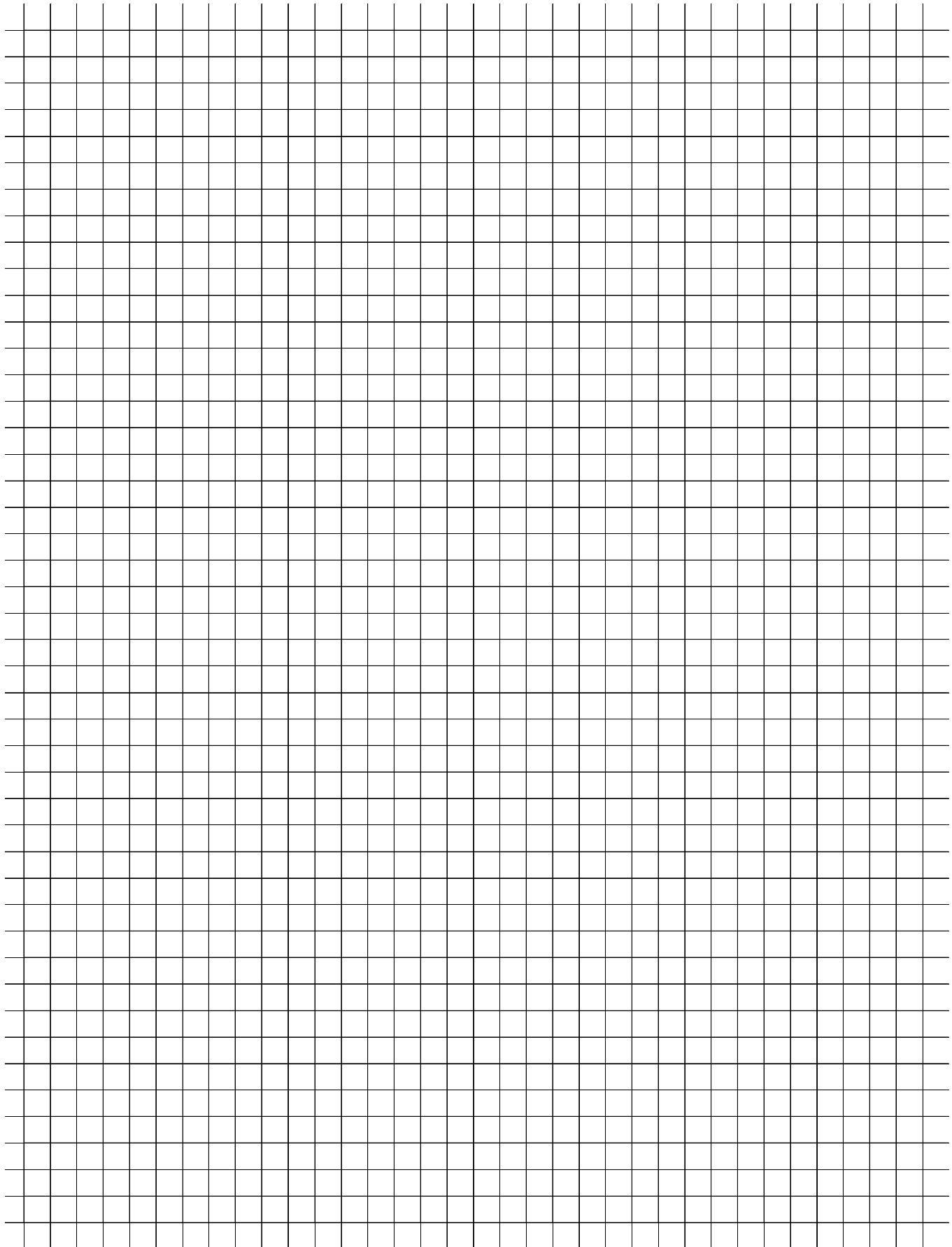
4301a00

Parts List acc. to Fig. 45

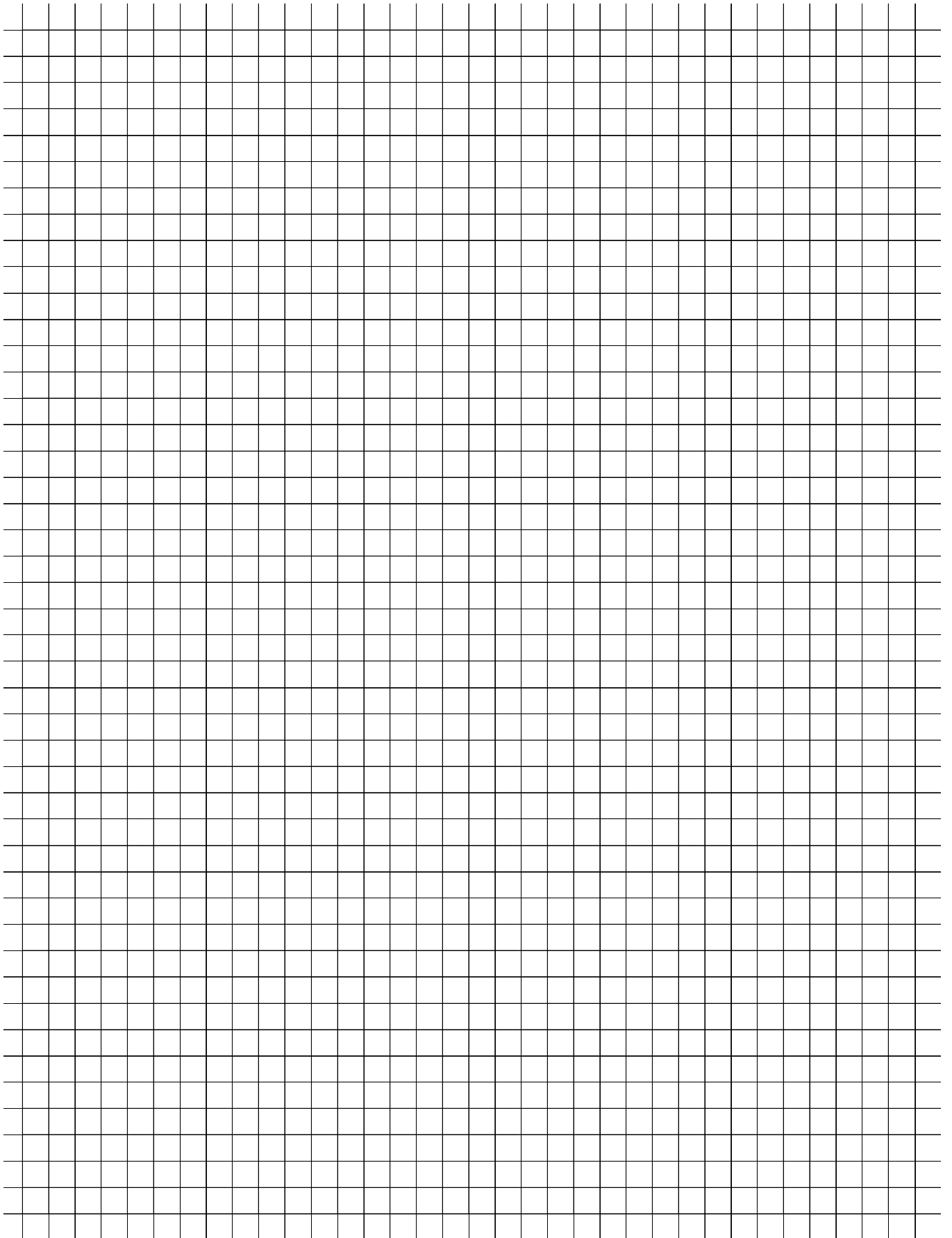
Pos.	Designation	Qty.	Part no.
1	Lockable lid, assy.	1	544-36963-1
2	Lock, consisting of parts pos. 2.1 to 2.4	1	544-36961-3
2.1	Key	2	233-14298-2
2.2	Dust cap	1	233-14298-3
2.3	Spagnolet	1	233-14298-1
2.4	Tongue	1	444-24682-1
2.5	Lid	1	444-24234-1

Subject to modifications

Note:



Note:



Subject to modifications

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Lincoln Industrial One Lincoln Way St. Louis, MO 63120-1578 USA Phone: (+1) 314 679 4200 Fax: (+1) 800 424 5359	Lincoln GmbH Heinrich-Hertz Straße 2-8 69190 Walldorf, Germany Tel: (+49) 6227 33-0 Fax: (+49) 6227 33-259	Lincoln Industrial Corporation 51 Changi Business Park Central 2 # 09-06 The Signature Singapore 486066 Phone: (+65) 6588-0188 Fax: (+65) 6588-3438 Email: sales@lincolnindustrial.com.sg	© Copyright 2008 Printed in Germany Web site: www.lincolnindustrial.com