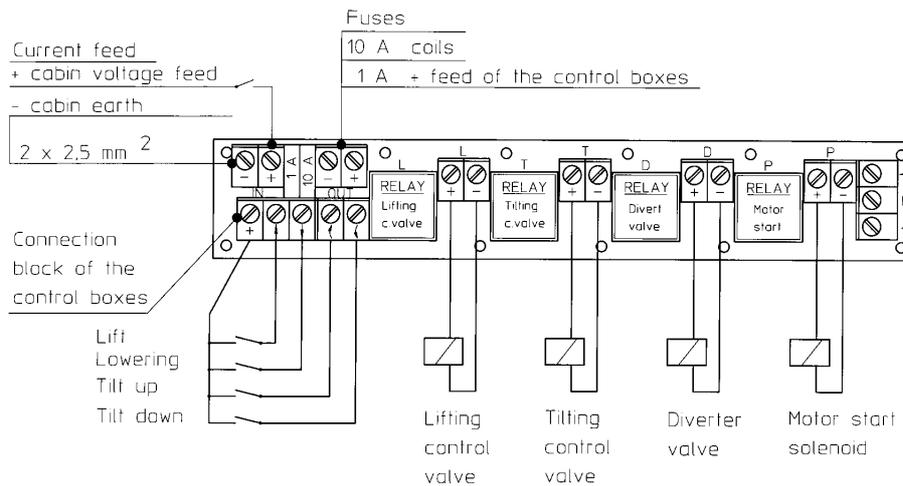


CENTRAL CONTROL UNIT

The operation of the central control unit is relay based. Each operation of the tail-lift has a relay of its own and its wiring is shown in electric schema below. Symbols of the schema are:

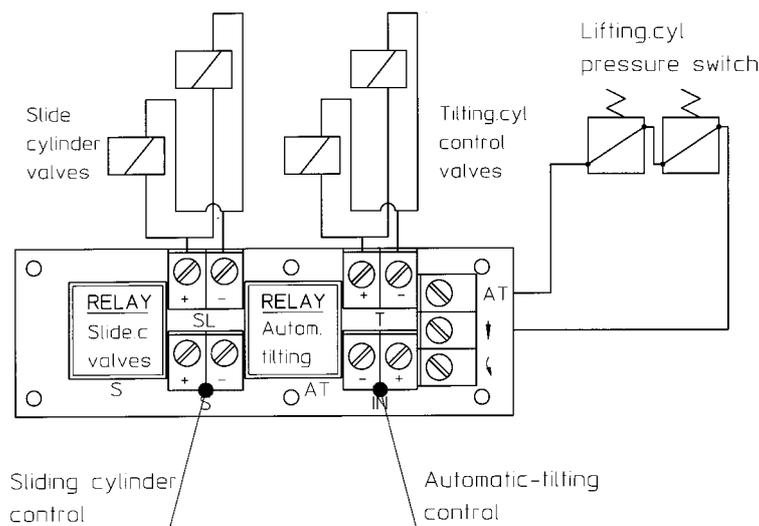
- L = lifting
- D = divert valve, lowering / tilt down
- OUT = slide cylinder control
- T = tilting
- P = pump start
- IN = current feed



In the MLA- model tail-lift there is extra print card. Extra print card controls slide cylinder and auto tilt option.

Symbols of the schema are:

- S = slide cylinder control
- IN = auto tilt control
- SL = slide cylinder lock valve control
- AT = auto tilt
- T = tilt cylinder lock valve control

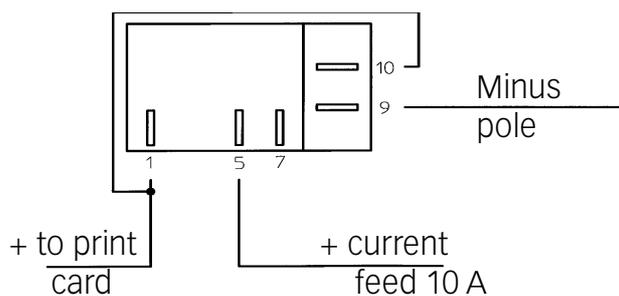


WARNING! The connections on print card are for the tail-lift use only. It is forbidden to use print card connections to any other application.

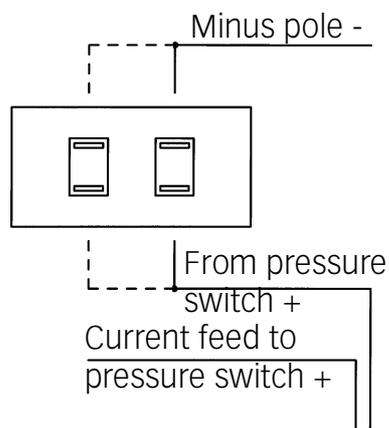
CONTROL CURRENT

The control current switch and platform warning light must be located to vehicles cabin. Locate control switch and warning light in visible and user friendly place. In electrical connections act on vehicles manufactures instructions.

Control current switch



Warning light



WARNING! Current feed for warning light / pressure switch must be taken directly from battery. It is forbidden to take current from tail-lift control switch.

In the warning light only one bulb is connected, if wanted both bulbs can be connected by installing wires as shown in drawing with dashed lines.

CONNECTING THE PUSH BUTTON BOXES

In MLA- models there is two control boxes in main button box. First one is for security and slide operations, second one is for platform control.

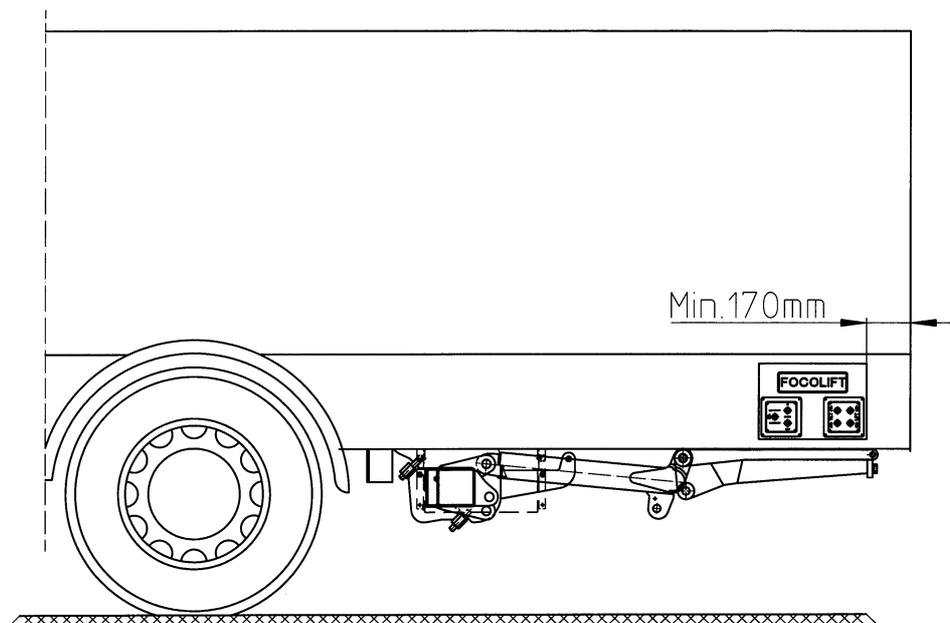
NOTE! Security button must be always activated when operating tail-lift.

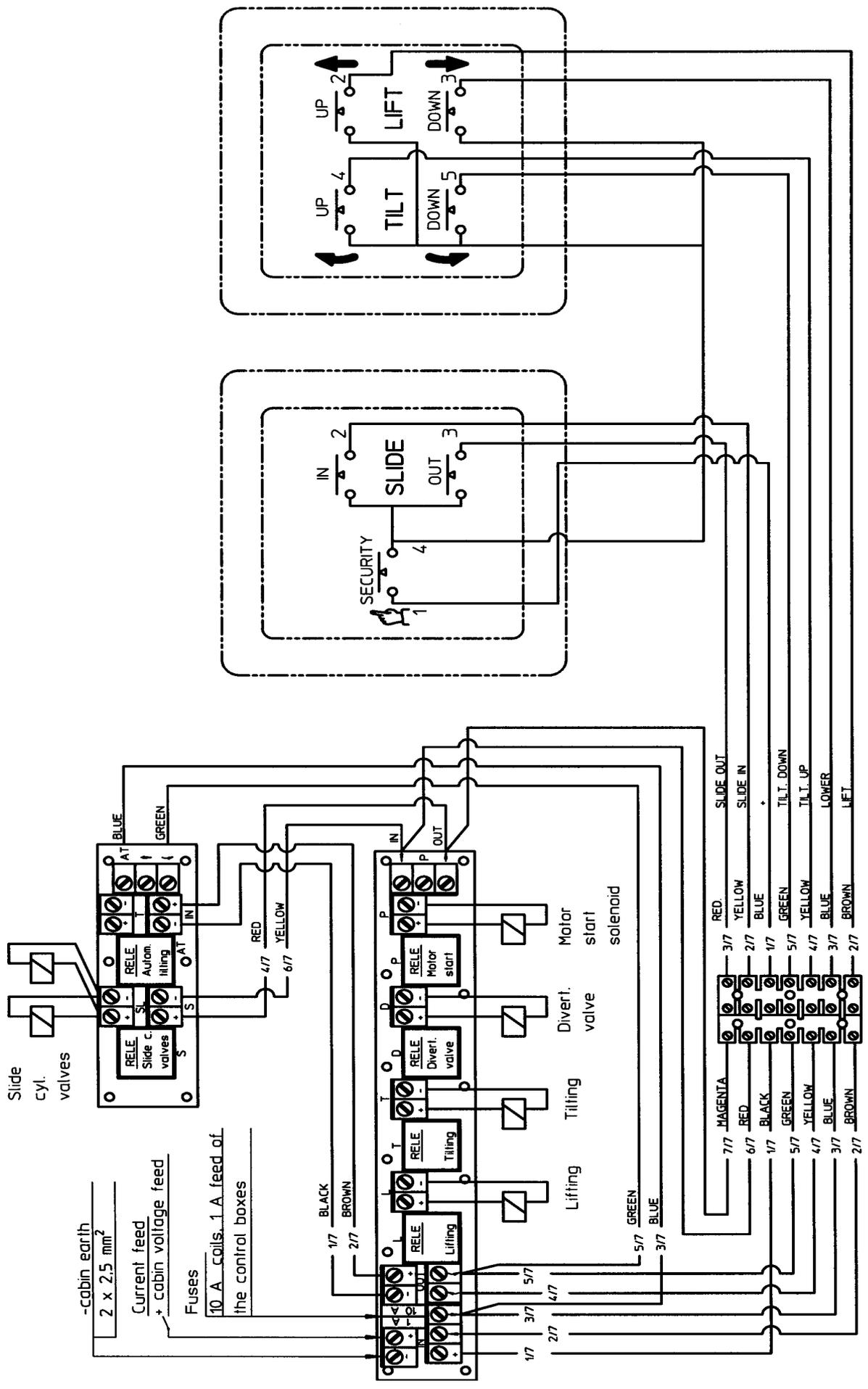
The wiring of control boxes is shown on next page.

When installing control boxes obey minimum safety distance as shown drawing bellow. This will give the user safety distance against operating tail-lift.

The push button boxes cables are number coded as follows:

- | | |
|--------------------|----------------|
| 1 = + current feed | 2 = lifting |
| 3 = lowering | 4 = tilting up |
| 5 = tilting down | 6 = slide in |
| 7 = slide out | |

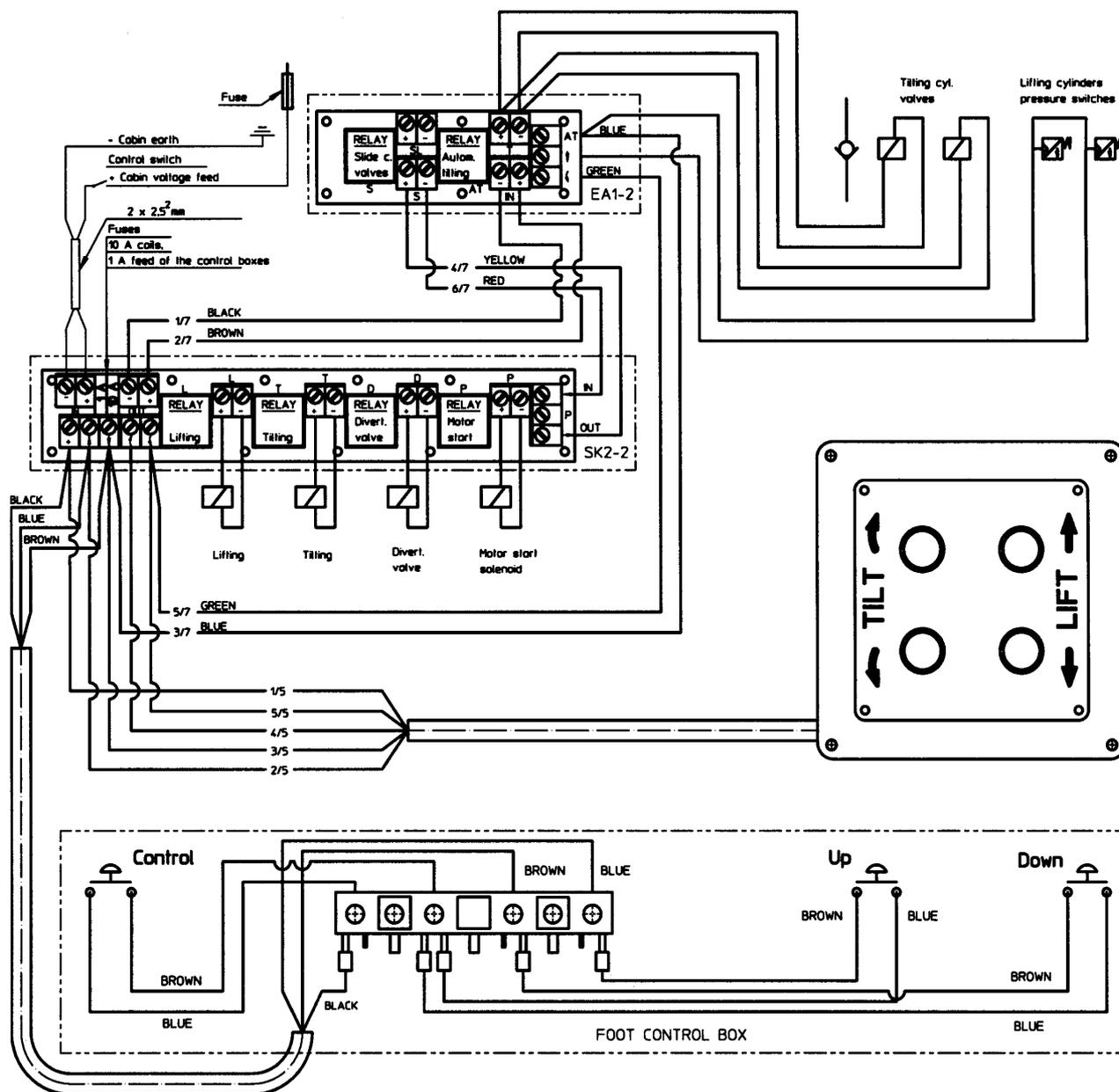




AUTOMATIC TILTING

The tail-lift is also available with automatic tilting option. If there is no foot control system, automatic tilting option doesn't require any extra installations.

If tail-lift is equipped with foot controls, foot controls cable must be connected to print card. Make sure that foot controls cable doesn't rub down to tail-lift structure when tail-lift is in use.



Full aluminium platforms foot controls cable colours differences from drawing as follows:

- Current feed + Yellow/green
- Lowering Brown
- Lifting Blue

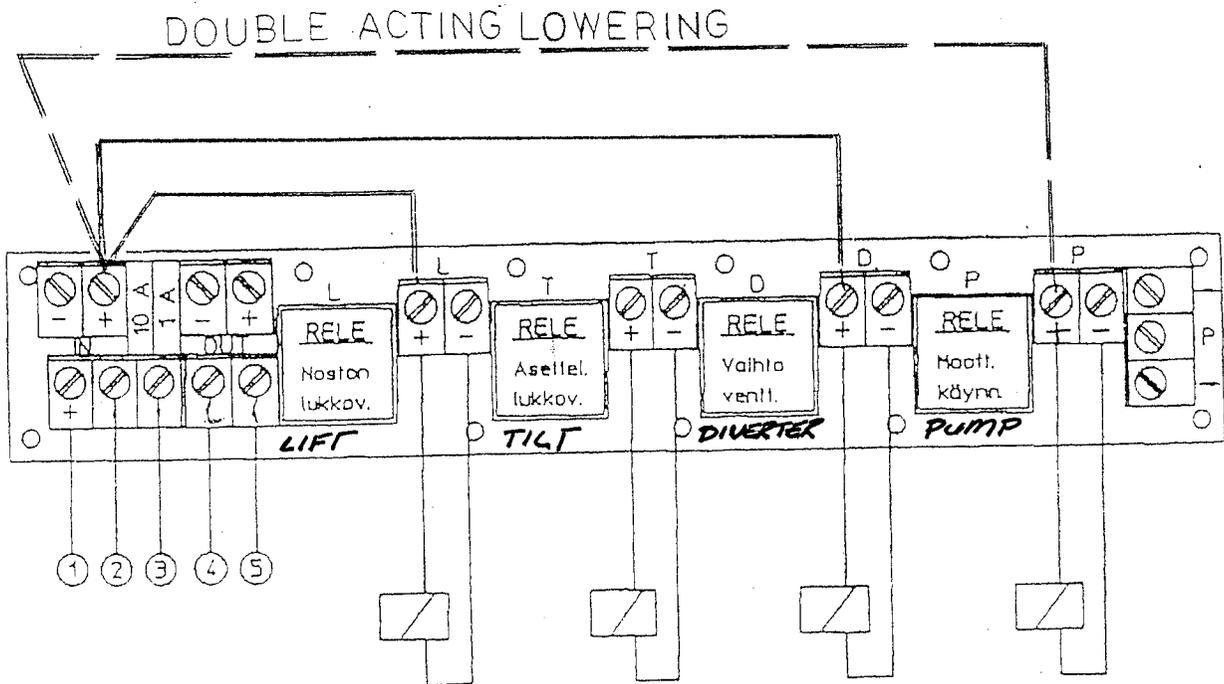
LVS

EMERGENCY OPERATING OF LIFTGATE

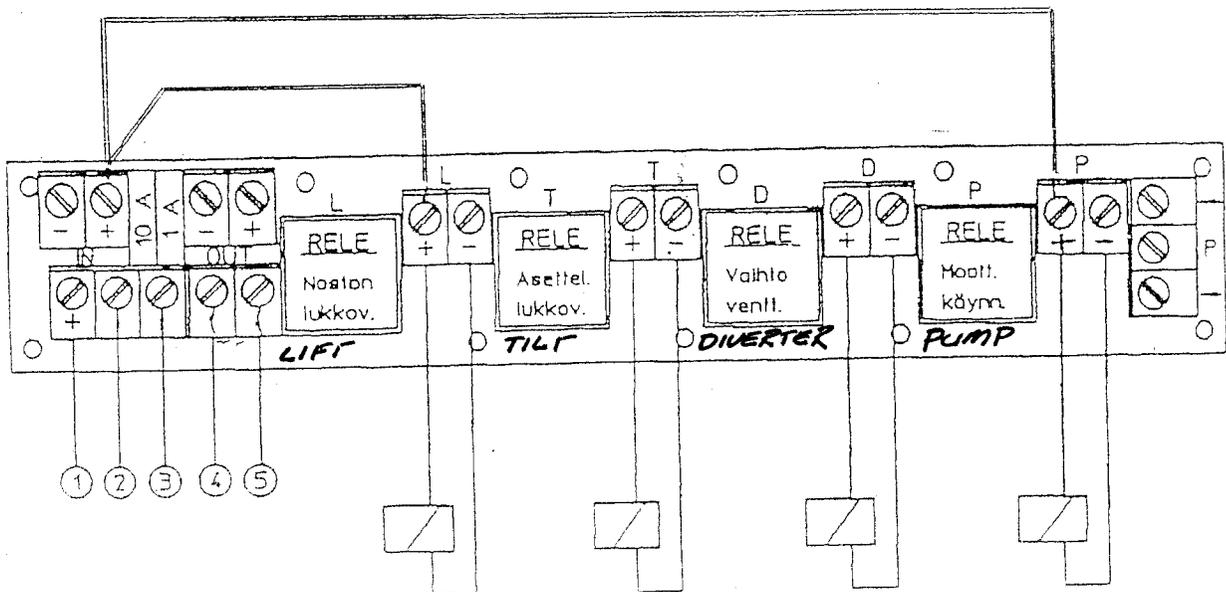
THE FOLLOWING ARE THE PRINCIPAL
DIAGRAMS SHOWING HOW TO OPERATE THE
LIFTGATE IN THE EVENT OF A CONTROL BOX
SWITCH FAILURE, BY USING JUMPER WIRES.

NOTE: CAUTION MUST ALWAYS BE USED ANY
AND ALL TIMES JUMPER WIRES ARE
TO BE USED.

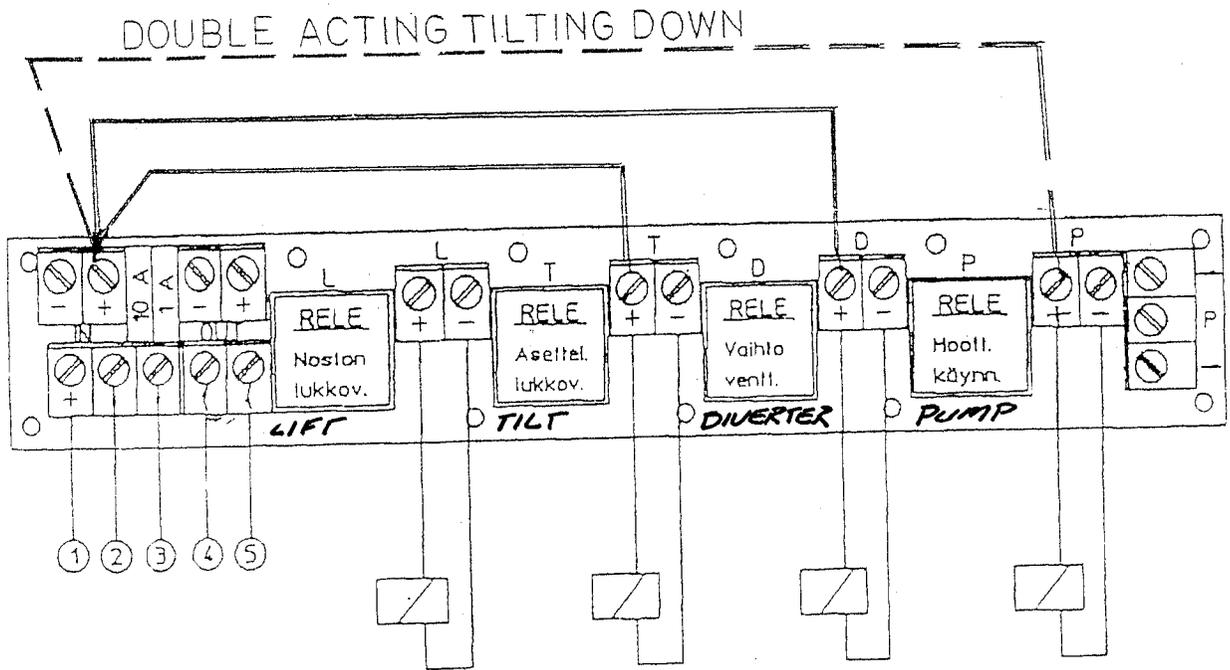
LOWERING



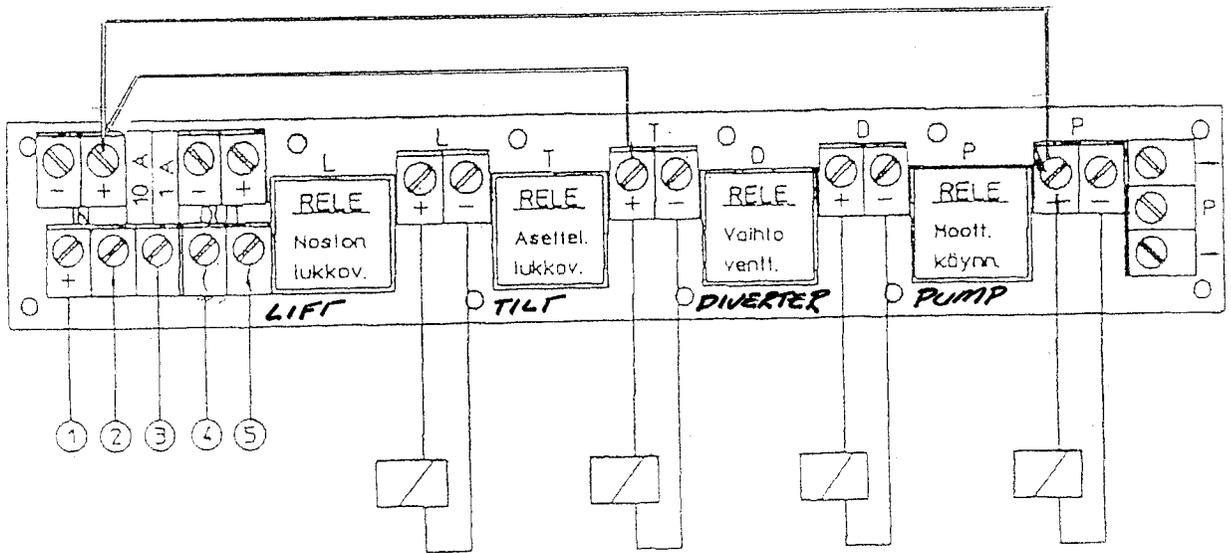
LIFTING



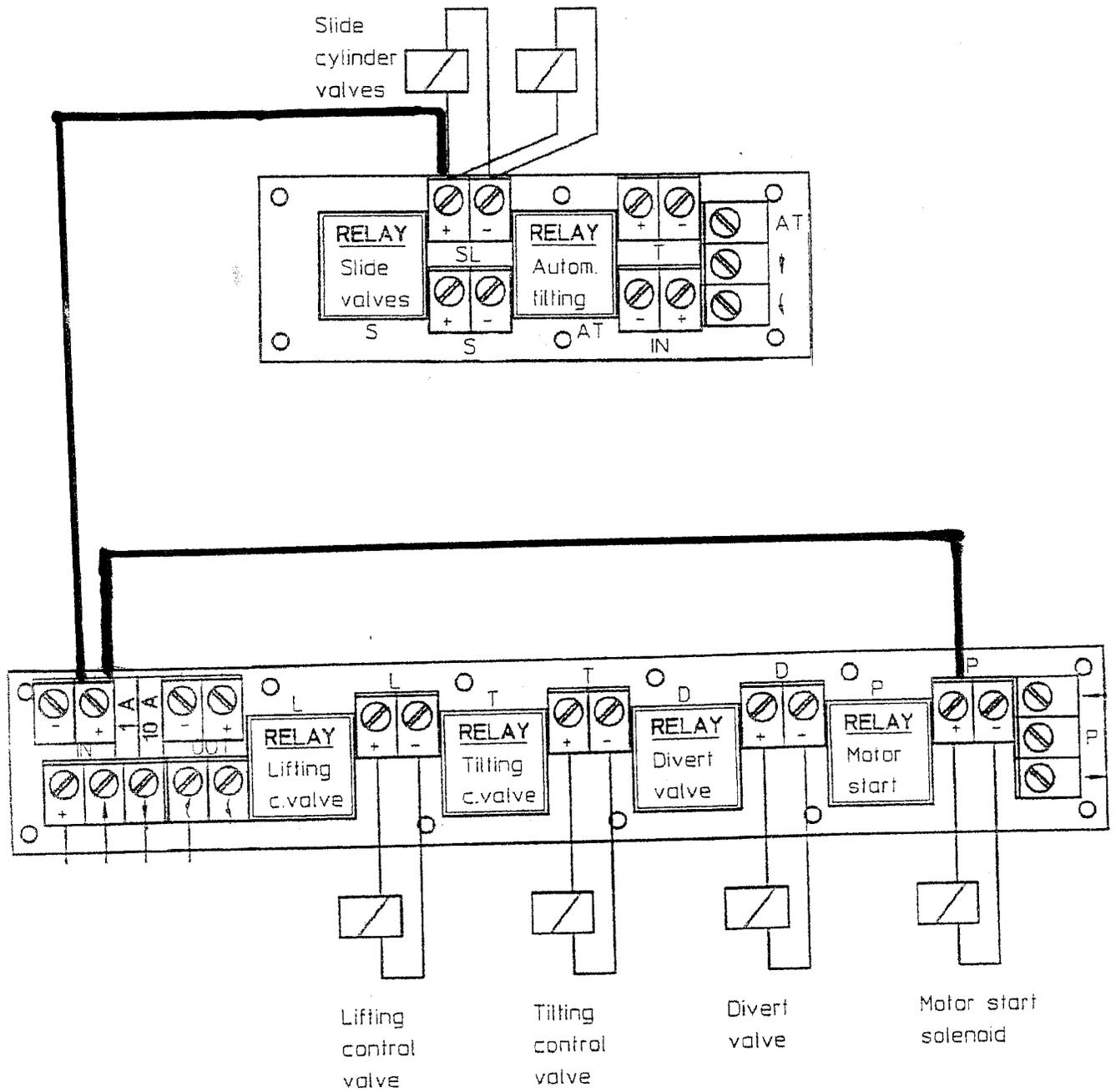
TILTING DOWN



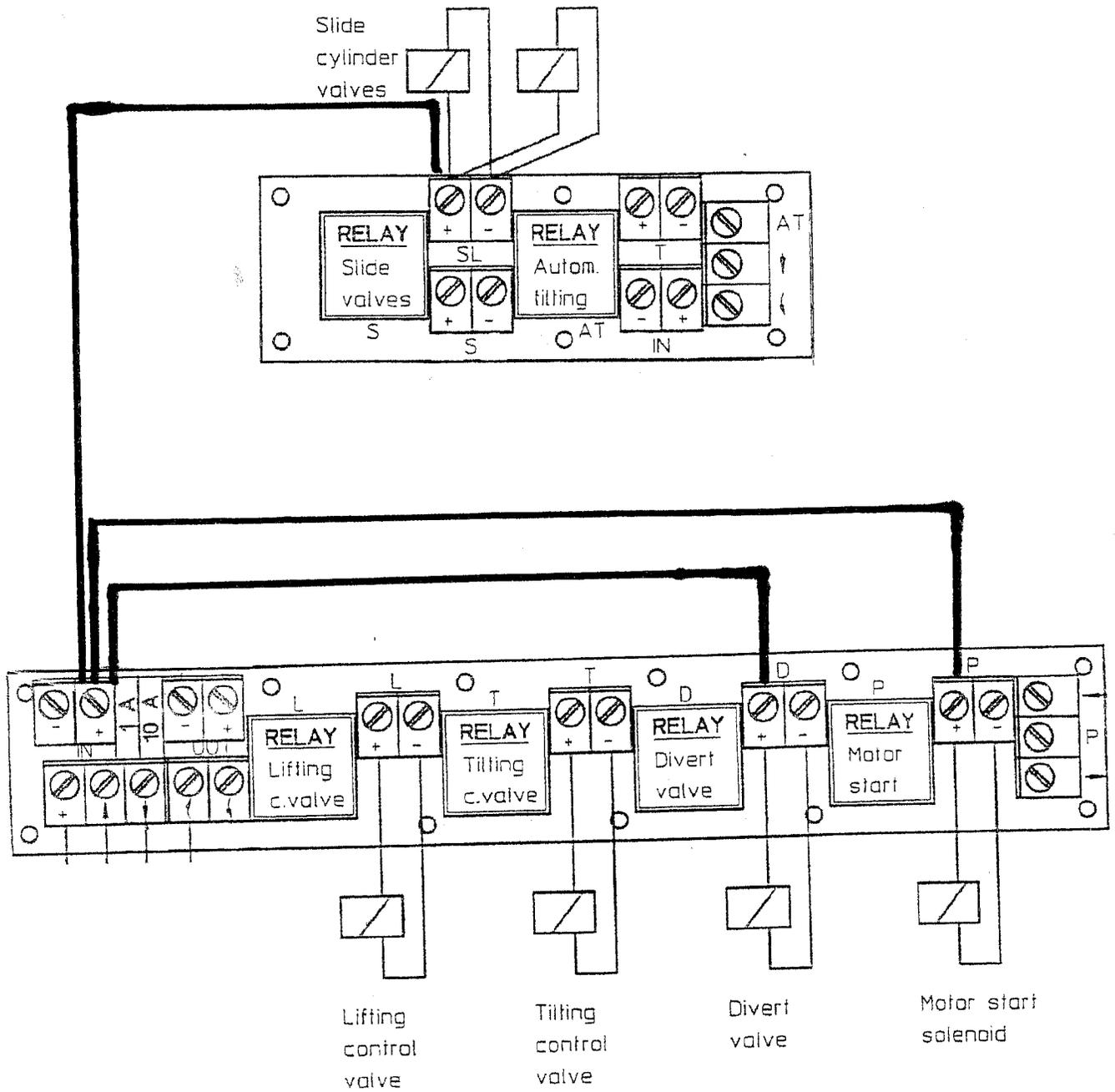
TILTING UP



SLIDE IN

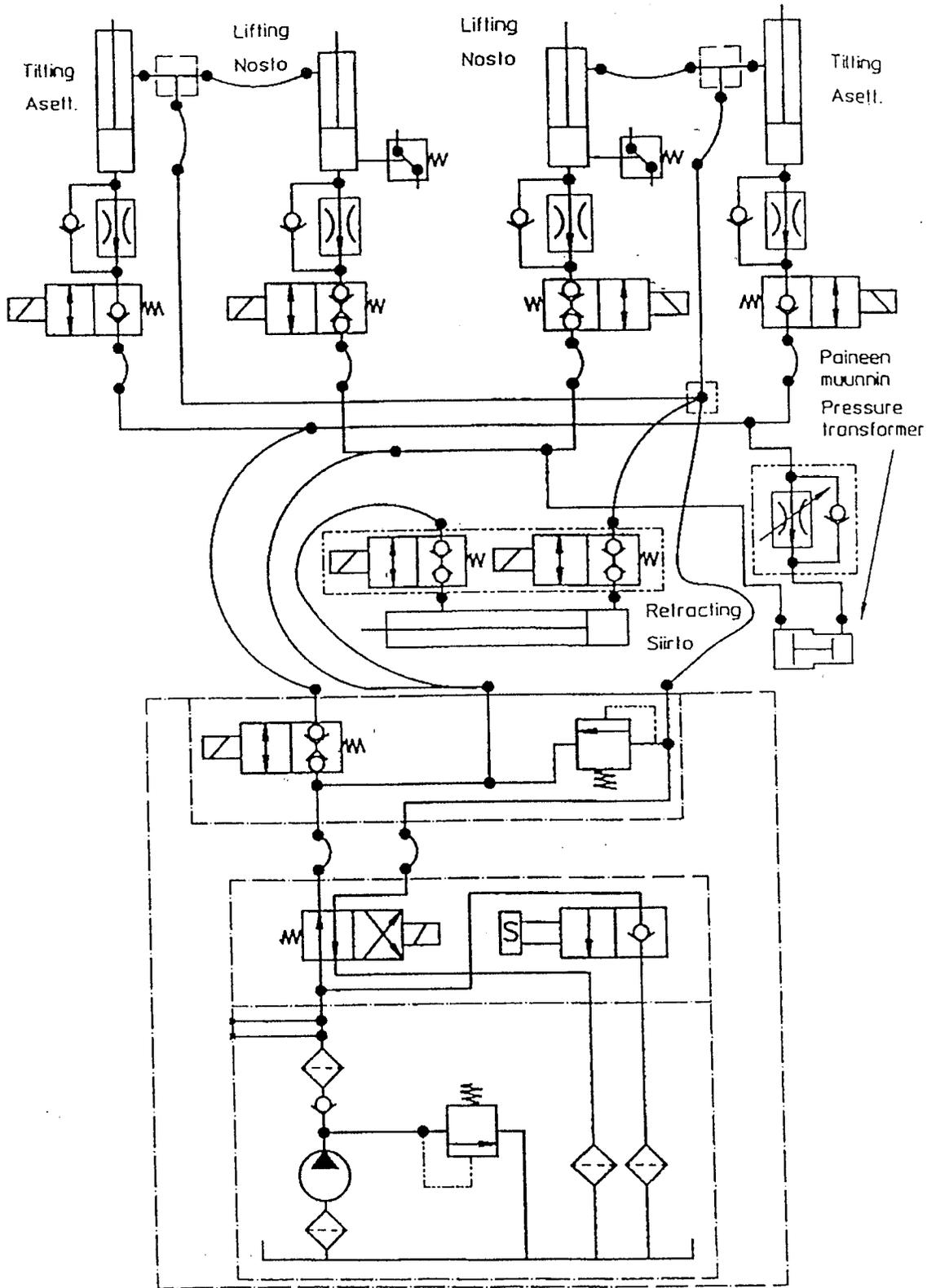


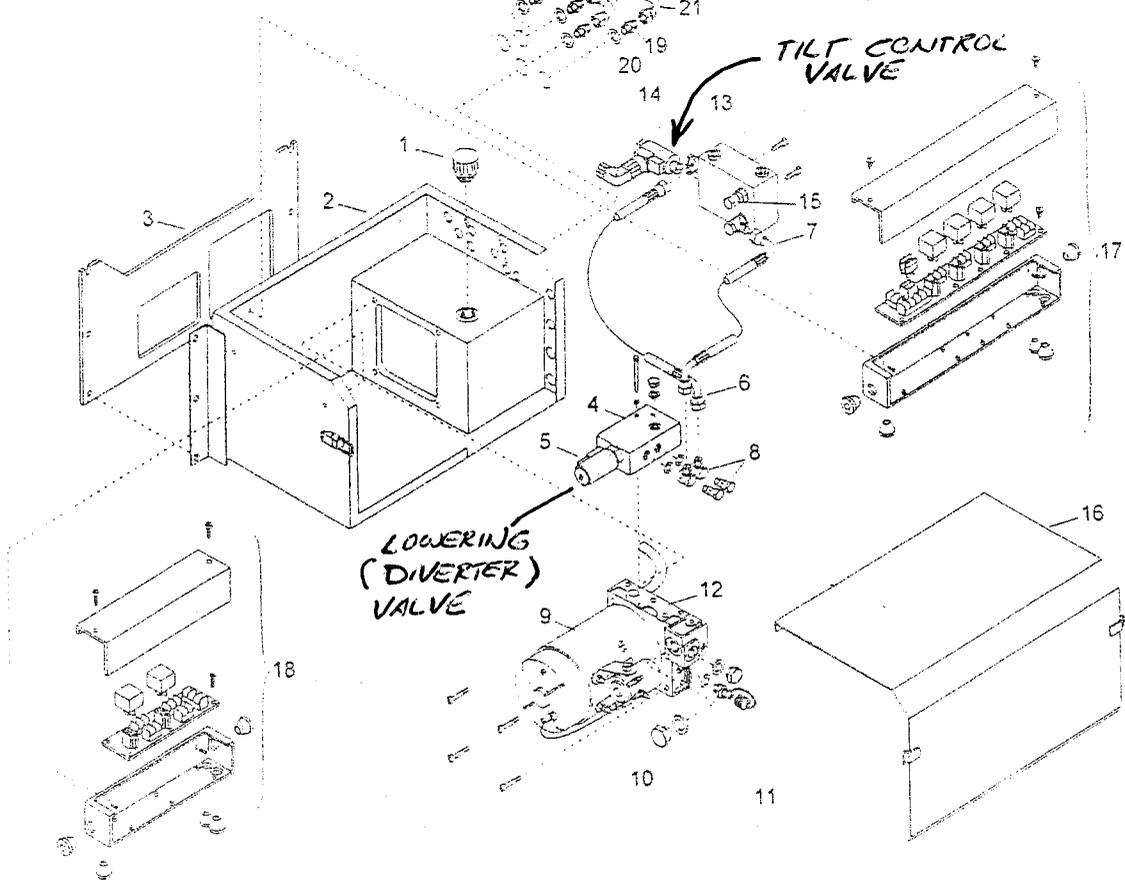
SLIDE OUT



HYDRAULIC DIAGRAM

Diagram below is for standard model where lock valves are located in the bottom of the tilting- and lifting cylinders. Pressure transformer for autotilt function is included.





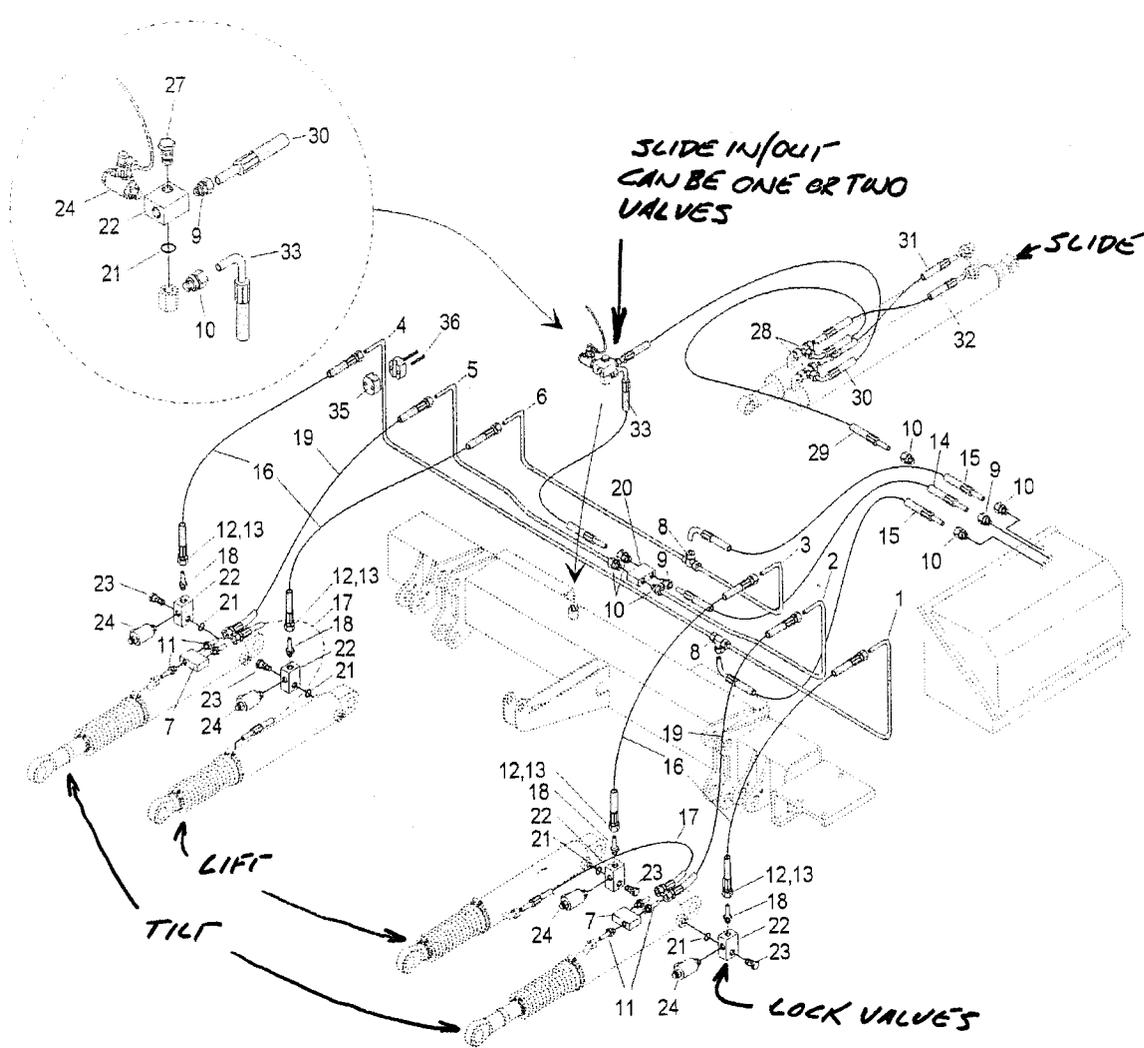
POWER PACK
3KW

Item	Part no	Qty	Description
-	22 0504 570	1	POWER PACK 3kw, 12V
1	24 0504 373	1	Breather plug
2	24 0504 751	1	Housing
3	22 0307 359	1	Mounting plate
4	23 0504 375	1	Lowering valve
5	24 0504 700	1	Coil 12V
6	220 4000 313	1	High pressure hose 1/4"
7	220 4000 901	1	High pressure hose 1/4"
8	23 0502 850	4	Banjo
9	24 0504 744	1	Motor 12V, 3kw
10	23 0504 541	1	Solenoid 12V
11	23 0501 714	1	Test nippel
12	24 0504 752	1	Valve block
13	22 0204 518	1	Valve body
14	23 0504 502	1	Lock valve 12V
15	23 0503 770	1	Releaf valve
16	24 0504 753	1	Cover
17	23 0504 137	1	Central control unit ML 12V
18	23 0504 351	1	Central control unit MLA 12V
19	23 0501 777	4	Male stud fitting
20	23 0502 611	4	Olive
21	220 4000 798	1	High pressure hose
22	220 4000 800	1	High pressure hose
23	220 4000 799	1	High pressure hose
24	220 4000 797	1	High pressure hose

Notes
1-18

*POWER UNIT USED
BEFORE SERIAL NUMBER
36000*

= incl. parts

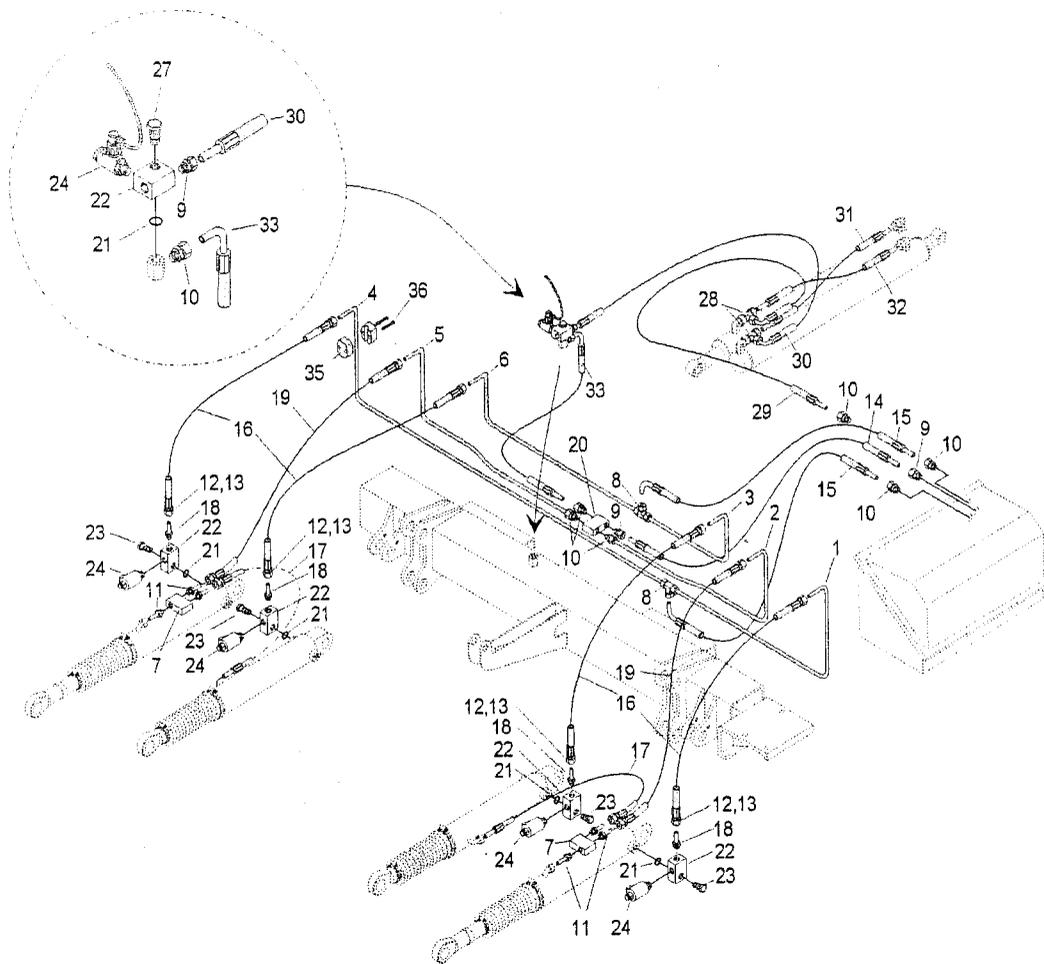


HYDRAULIC CIRCUIT MLLTA 2000/2500

Item	Part no	Qty	Description	Notes
1	220 408 547	1	Tube	
2	220 408 548	1	Tube	
3	220 408 549	1	Tube	
4	220 408 591	1	Tube	
5	220 408 592	1	Tube	
6	220 408 593	1	Tube	
7	220 408 546	2	Distribution block	
8	230 502 926	3	T-fitting	
9	230 502 611	2	Male stud fitting	
10	230 501 777	8	Male stud fitting	
11	230 503 598	6	Pipe nipple	
12	230 503 715	21	Olive	
13	230 503 716	21	Nut	
14	220 408 560	1	High pressure hose 3/8"	# 12,13
15	220 408 559	2	High pressure hose 1/4"	# 12,13
16	220 408 557	6	High pressure hose 1/4"	# 12,13
17	220 408 558	2	High pressure hose 1/4"	
18	230 503 782	4	Pipe nipple	
19	220 408 557	6	High pressure hose 1/4"	# 12,13
20	220 408 553	1	Distribution block	

= incl.parts

14.6.00/MJN

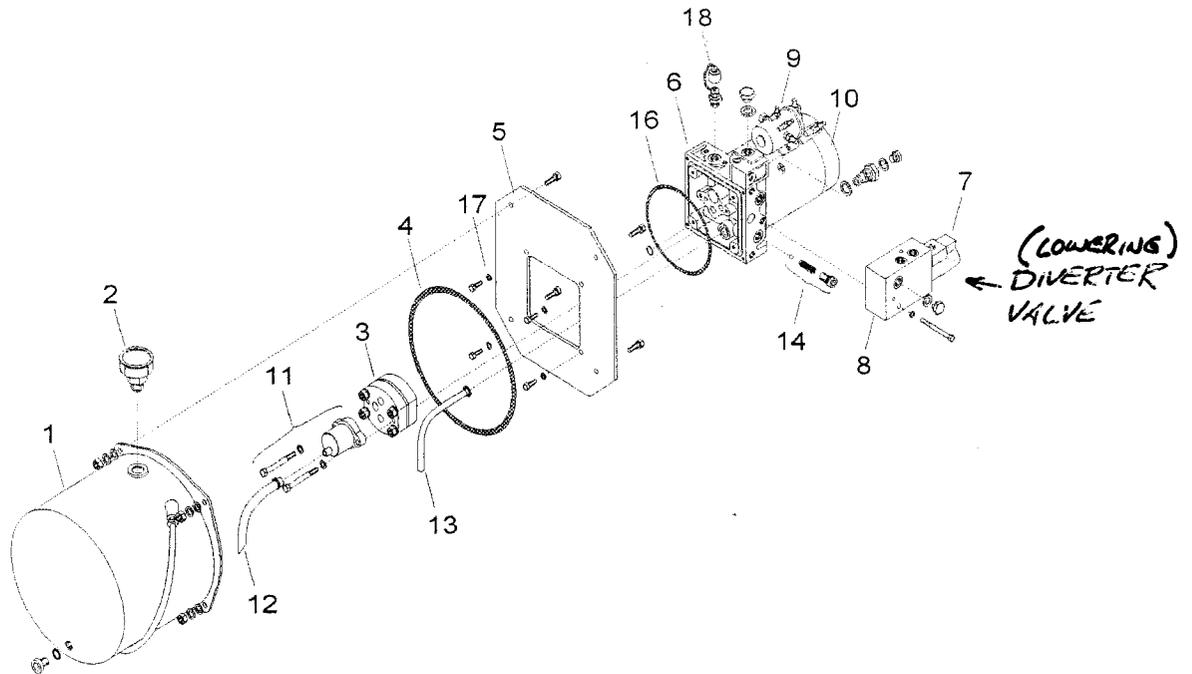


Item	Part no	Qty	Description	Notes
21	230 540 003	10	Seal ring	
22	230 504 712	5	Valve block+Banjo-bolt	# 23
23	230 504 715	4	Banjo-bolt/flow control valve	
24	230 504 502	5	Lock valve kit 12V	# 21-23
24	230 504 503	5	Lock valve kit 24V	# 21-23
27	230 504 715	1	Banjo	
28	230 504 556	3	T-fitting	
29	220 4000 938	1	High pressure hose 1/4"	
30	220 4000 937	1	High pressure hose 1/4"	
31	220 4000 578	1	High pressure hose 1/4"	
32	220 4000 577	1	High pressure hose 1/4"	
33	220 4000 194	1	High pressure hose 1/4"	

For autotilt version following parts are needed

24	230 504 518	2	Lock valve 12V	in tilting cylinders
24	230 504 519	2	Lock valve 24V	in tilting cylinders
-	220 305 952	1	Pressure transformer	
-	230 504 532	2	Pressure switch	in lifting cylinders
-	230 502 792	1	Flow control valve	
-	230 710 021	1	Banjo	in pressure transformer
-	230 502 806	1	Male stud fitting	in pressure transformer
-	220 409 375	1	High pressure hose 1/4"	

= incl.parts



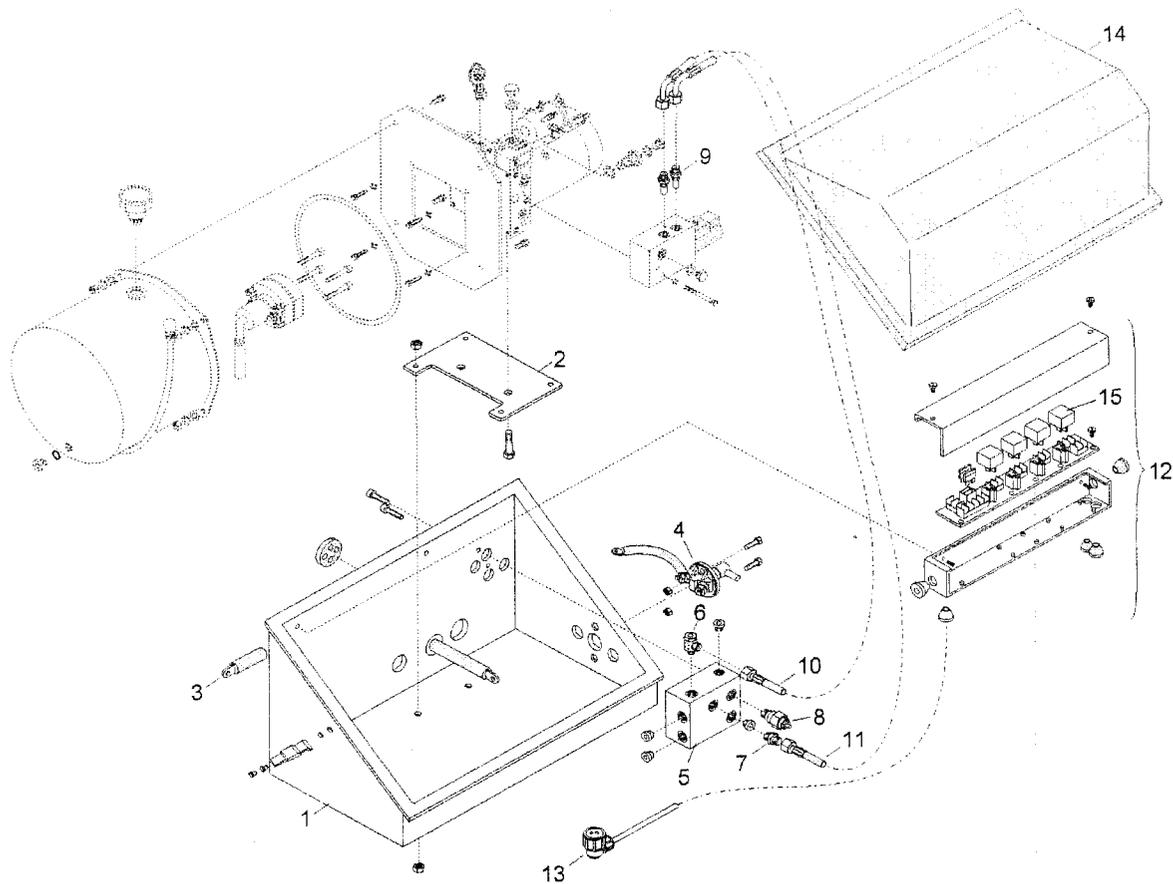
HYDRAULIC UNIT SMITHS 3kW

Item	Part no	Qty	Description	Notes
-	220 204 718	1	POWER PACK 12V	Complete
-	230 504 784	1	HYDRAULC UNIT 12V	# 1- 17
1	240 504 524	1	Oil tank	
2	240 504 373	1	Breather plug	
3	240 504 520	1	Pump	
4	240 504 521	1	O-ring	
5	240 504 702	1	Collar	
6	240 504 752	1	Valve block	
7	240 504 700	1	Coil 12V	
8	230 504 375	1	Lowering valve 12V	Complete
9	240 504 542	1	Solenoid 12V	
-	230 504 787	1	Fuse 12V / 130A	
-	230 504 773	1	Knop	
10	240 504 744	1	Motor 12V	
-	240 504 528	1	Thermal relay 12-24V	
11	240 504 716	1	Suction filter	
12	240 504 717	1	Suction pipe	
13	240 504 718	1	Return pipe	
14	240 504 719	1	Releaf valve	
16	240 504 720	1	O-ring	
17	230 504 727	4	Seal	
18	230 501 714	1	Test nippel	Tema 121 R1/4

= incl.parts

14.6.-00/MJN

POWER UNIT USED AFTER
SERIAL NUMBER 36001



POWER PACK SMITHS 3kW

Item	Part no	Qty	Description	Notes
1	220 307 384	1	Housing	
2	220 307 501	1	Base plate	
3	220 408 561	1	Earth cable	
4	230 503 778	1	Main isolator switch	
5	220 204 161	1	Valve body	
6	230 502 850	2	Banjo	
7	230 501 777	1	Male stud fitting	
→ 8	230 503 770	1	Relief valve	
9	230 501 777	2	Male stud fitting	
10	220 409 375	1	High pressure hose 1/4"	
11	220 409 375	1	High pressure hose 1/4"	
12	230 504 137	1	Central control unit 12V	see control system
	230 504 138	1	Central control unit 24V	
13	220 408 587	4	Cable kit	
14	220 307 399	1	Cower	
15	240 503 227	4	Relay 12V	
	240 503 226	4	Relay 24V	
-	230 502 737	1	Test nippel	
-	230 504 190	1	Drain pipe	
-	230 503 769	2	Lock	

= incl.parts