

Universal Lift Applicator

1005

for the following products

Part.-No.	Description	Type
5950250	Universal Lift Applicator	1005L-100H
5950253	Universal Lift Applicator	1005R-100H
5950309	Universal Lift Applicator	1005L-150H
5950251	Universal Lift Applicator	1005L-220H
5950254	Universal Lift Applicator	1005R-220H
5950252	Universal Lift Applicator	1005L-300H
5950255	Universal Lift Applicator	1005R-300H
5950308	Universal Lift Applicator	1005L-400H
5950365	Universal Lift Applicator	1005R-400H

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1.1 Instruction

Important information and instructions in this documentation are designated as follows::



Danger!

Draws your attention to an exceptionally grave, impending danger to your health or life.



Warning!

Indicates a hazardous situation that could lead to injuries or material damage.



Attention!

Draws attention to possible dangers, material damage or loss of quality.



Notice!

Gives you tips. They make a working sequence easier or draw attention to important working processes.



Environment!

Gives you tips on protecting the environment.



Handling instruction



Reference to section, position, illustration number or document.



Option (accessories, peripheral equipment, special fittings).

1.2 Intended Use

- The device is manufactured in accordance with the current technological status and the recognized safety rules. However, danger to the life and limb of the user or third parties and/or damage to the device and other tangible assets can arise during use.
- The device may only be used for its intended purpose and if it is in perfect working order, and it must be used with regard to safety and dangers as stated in the operating manual.
- The Device was developed to work in combination with a **Hermes A** printer.
- The applicator is intended exclusively for labeling suitable materials that have been approved by the manufacturer. Any other use or use going beyond this shall be regarded as improper use. The manufacturer/supplier shall not be liable for damage resulting from unauthorized use; the user shall bear the risk alone.
- Usage for the intended purpose also includes complying with the operating manual, including the manufacturer's maintenance recommendations and specifications..



Notice!

The complete documentation is included in the scope of delivery on CD ROM, and can also currently be found in the Internet.

1. Introduction

1.3 General Safety Instruction

- Connect the applicator to other devices only which carry safety extra-low voltage.
- Switch off in case off connecting or disconnecting some devices (computer, printer and accessories)
- The applicator is only to use in a dry environment. No wetness seems like splash water, fog and other.

**Warning!**

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.

**Warning!**

In the applicator operation are moving parts open. Particularly in the pad area between the ground and labeling position.

Don't reach into this area in case of operation. Save hairs, loosely wear and emblazonments.

Close the compressed air supply in case of necessary works.

**Warning!**

Don't make manipulation at the device which doesn't described in the printer and applicator manuals.

1.4 Environment



Obsolete devices contain valuable recyclable materials that should be sent for recycling.

- Send to suitable collection points, separately from residual waste.

The modular construction of the applicator enables it to be easily disassembled into its component parts.

- Send the parts to recycling.

2.1 Device Overview

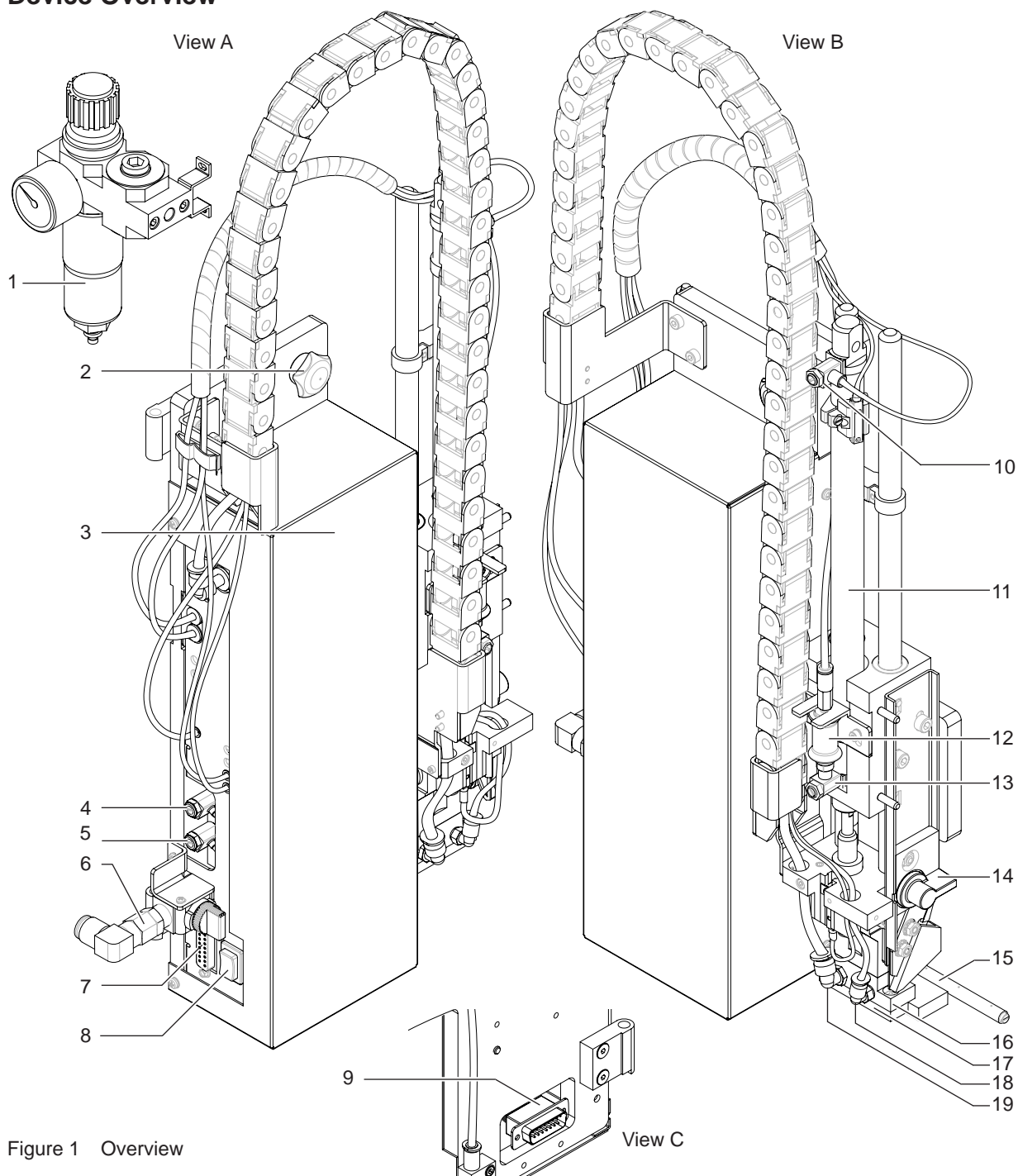


Figure 1 Overview

- | | |
|---------------------------------------|--|
| 1 Pneumatic Maintenance Unit (option) | 11 Lift Cylinder |
| 2 Knurled Screw | 12 Hand Slide Valve |
| 3 Cover | 13 Throttle Valve Lift Cylinder (bottom) |
| 4 Throttle Valve Support Air | 14 Knob, Fixing Pad Assembly |
| 5 Throttle Valve Vacuum | 15 Blow Tube (customized) |
| 6 Connector Compressed Air | 16 Adapter Pad Retainer |
| 7 SPS-Interface | 17 Pad (customized) |
| 8 Pre-dispense Key | 18 Connector Vacuum |
| 9 Connector Applicator-Printer | 19 Connector Blow Air |
| 10 Throttle Valve Lift Cylinder (top) | |

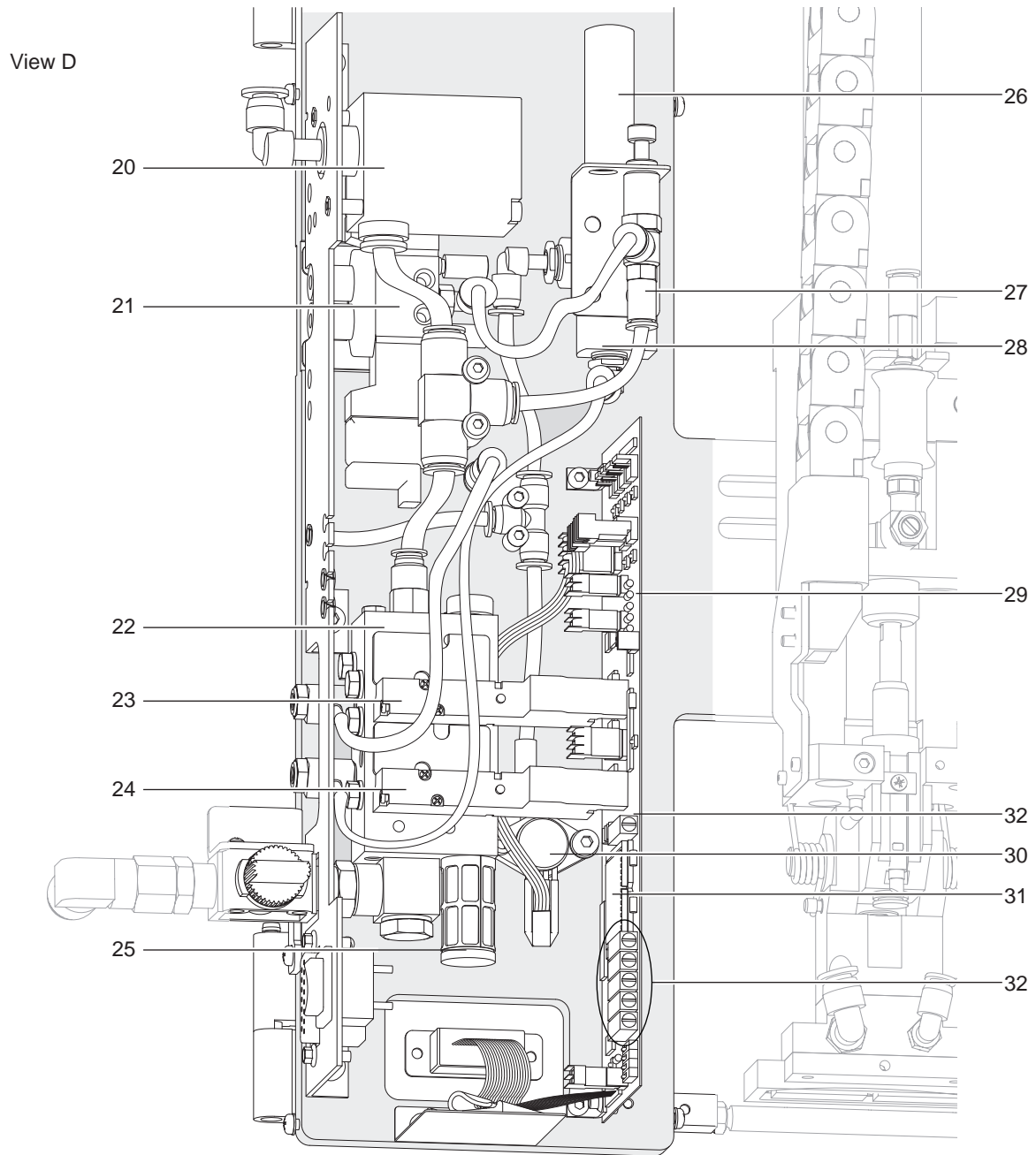


Figure 2 Overview

- | | |
|------------------------------------|------------------|
| 20 Valve Blow Air | 30 Sensor Vacuum |
| 21 Valve Lift Cylinder | 31 Controller |
| 22 Valve Block | 32 Potentiometer |
| 23 Valve Support Air | |
| 24 Valve Vacuum | |
| 25 Sound Absorber Valve Block | |
| 26 Sound Absorber Vacuum Generator | |
| 27 Miniature Pressure Regulator | |
| 28 Vacuum Generator | |
| 29 PCB Applicator Control | |

2.2 Functional Description

2.2.1 Sensors

Labeling Sensor

The contact of the pad onto the product or the reaching of the release position is detected by a Hall-sensor. For which purpose the displacement of the adapter bolt in relation to the sensor is used.

Sensor Start Position

The start position is the upper end position of cylinder and the position of the pad which takeover the label from printer. This position will be detected via a Hall-sensor in interaction with a magnet mounted inside cylinder.

Sensor Vacuum

The correct transfer of a label will be checked by the vacuum sensor. It also checks that there is no longer a label on the pad in case of the return movement.

2.2.2 Pneumatic

Cylinder

A cylinder with stroke of 100-400 mm is used for the transport of labels between the dispense edge of the printer and the labelling position. It is controlled by the "cylinder" valve. The speed of movement can be changed by two throttle valves mounted at cylinder.

Pad

The label will be transported by a pad. The pad must be appropriate to the size of label. The pad assembly and cylinder are conjoint and it will range by the cylinder.

In case of a label transportation it's a vacuum applied on the pad.

When the applicator will be used in 'blow' mode, the label will be applied by a high pressure.

Vacuum Generator

The vacuum at the pad will be produced by a vacuum generator. The vacuum generator is controlled by the vacuum valve "Vakuum". It's possible to adjust the low pressure by a throttle valve.

Blow Tube

Air is blown from below (supporting air) through a blow tube onto the label in order to support the transfer of the label from the printer to the pad. It's possible to adjust the direction of the blast. The supporting air is switched on by the supporting air valve "Stützluft".

Pneumatic Maintenance Unit

The pneumatic maintenance unit is offered as an option for the applicator. The important components of the pneumatic maintenance unit are a pressure reducer with manometer, a water separator with micro filter and a main connector for compressed air.

Valve Block

The distribution of the compressed air to the various pneumatic units is made in the valve block.

2.2.3 Electronics / PCB

The electronics are supplied with both operating voltages 5 V and 24 V via the printers peripheral interface..

Function of the most important components

S 1 - S 4	Switches for setting the operating mode. ▷Operator's Manual "Universal Applicator with Lift Cylinder", DIP-Switches
LED 1 - LED 3	Status of external Signals via PLC-Interface ▷Operator's Manual "Universal Applicator with Lift Cylinder", Function of the LED's... / PLC-Interface
LED 4	Status of the start position sensor red - in active condition: LED ON ▷Operator's Manual "Universal Applicator with Lift Cylinder", Function of the LED's...
LED 5	Status of the sensor labeling position red - in active condition: LED ON ▷Operator's Manual "Universal Applicator with Lift Cylinder", Function of the LED's...
LED 6	Label on pad yellow - in active condition: LED ON ▷Operator's Manual "Universal Applicator with Lift Cylinder", Function of the LED's...
LED 7	Operating voltage 5 V yellow - in active condition: LED ON ▷Operator's Manual "Universal Applicator with Lift Cylinder", Function of the LED's...
R11	Potentiometer for basic alignment of vacuum sensor ▷ 5.4 Check the vacuum / sensor vacuum
R19 - R23	Adjustment delay times (blow air, support air ON and OFF, blocking time, start inhibitor) ▷Operator's Manual "Universal Applicator with Lift Cylinder", Potentiometer
U13	Controller to operate the internal procedures, to implement the SPI interface (logical connection to the printer), realize PLC interface and contains the applicator firmware.

Table 1 Components on PCB

Reading Points

Basic alignment vacuum sensor	X 14 PIN 1 - PIN 2	Reference voltage: 1,00 -1,05V Iff the vacuum is on and the pad is covered hermetic: > 3 V ▷ 5.4 Check the vacuum / sensor vacuum
Sensor labeling position	X 8 PIN 1 - Ground	If the labeling sensor is operated: > 3,1 V ▷ 5.1 Labeling sensor/ Sensor start position
Start position sensor	X 7 PIN 1 - Ground	If the start position sensor is operated: > 3,1 V ▷ 5.1 Labeling sensor/ Sensor start position

Table 2 Reading points at PCB

3.1 Tools

All tools you need for repair the applicator.

tools	size	for assembly
combination wrench	5,5 mm	cylinder plunger
	9,0 mm	manual valve, throttle valve
	10,0 mm	guide rod
	14,0 mm	blocking valve
	19,0 mm	lift cylinder
hexagon wrench	2,0 mm	valve block, energy track
	2,5 mm	PCB, guiding plate, manual valve ...
	3,0 mm	sensor vacuum, angle bracket on basic plate
	4,0 mm	retainer bracket on pad assembly
crosstip screwdriver	PH0	vacuum and support air valve
	PH2	cover, blocking valve, blow tube retainer, sensors
PLCC-extractor cab-Part.-No.: 8920001		changing controller
wrist grounding		for works at PCB and controller
manometer	to 7 bar	pressure measurement
soft brush, cloth, multi purpose cleaner (without solvent)		

Table 3 Tools and their purpose



Attention!

Pull tubes (1) at pneumatic connectors only if the releasing ring (2) pressed. (Figure 3 right).

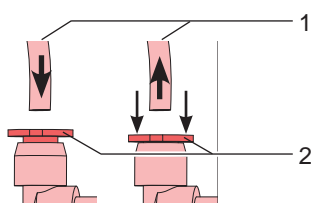


Figure 3 Push (left) and pull (right) of tubes

3.2 Cleaning



Attention!

Never use solvent and abrasive.

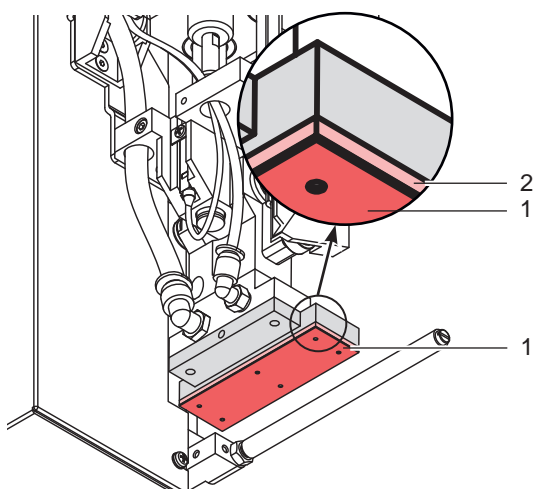


Figure 4 Pad with absorbability plate and slide foil

- ▶ Clean the outside surfaces with multi purpose cleaner.
- ▶ In regularly function it's possible that accrue dust particles and label splits. Remove that by a soft brush or/and a vacuum cleaner.
- ▶ Especially at slide foil (1) and absorbability plate (2) it's possible that fouling deposit.
To receive an ideal takeover and handling of the label it's necessary to clean the surface of slide foil at regular intervals.

4 Replace Assembly Units

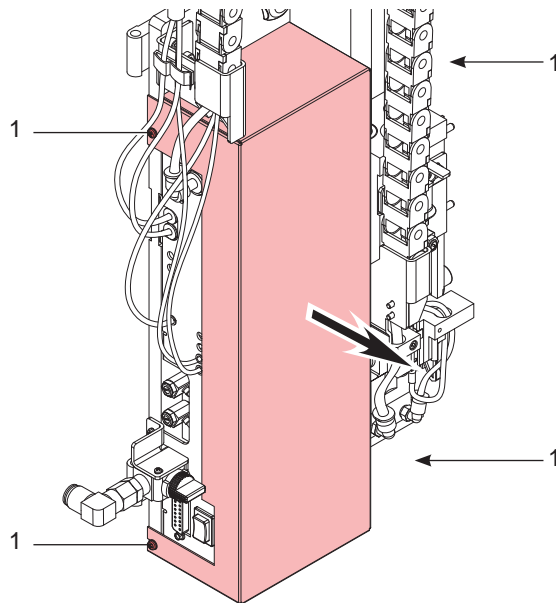
11

To divide on the mother plate to arrive it's necessary to dismount the cover.
Before the regular work will start it's absolutely necessary to mount the cover again.



Warning!

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.

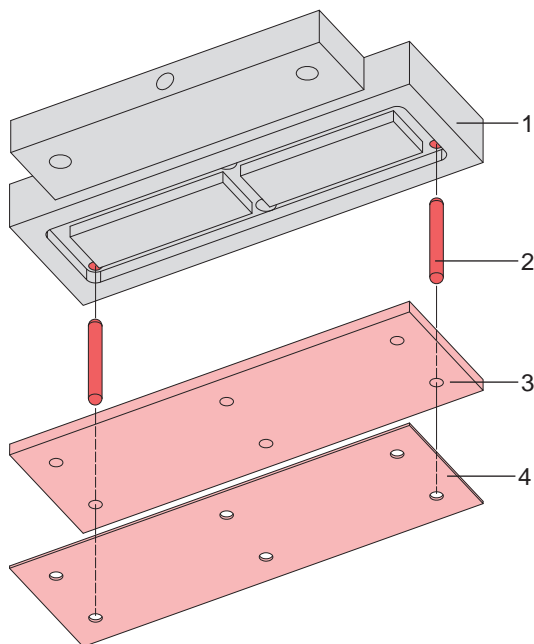


Dismount Cover

1. Loosen screws (1).
2. Remove cover in direction of arrow.

Figure 5 Cover mount and dismount

4.1 Bonding Absorbability Plates and Slide Foil Onto the Pad



1. Dismount the pad unit (1).
2. Remove the worn foam plate respectively slide foil completely.
3. Clear the surface from remains of glue.
4. Pad, foam plate and slide foil has a guide drilling for easier positioning. Put into the pad (1) drilling the pins of Ø 2mm (2).
5. Remove covering foil from the foam plate (3).
6. Slide the foam plate (3) with its guide drilling on the studs in such a way that the uncovered adhesive side faces the pad and the suction bore holes of the foam plate (3) do exactly cover the tubes in the pad. Press the foam plate firmly on the pad (1).
7. Press the foam plate (3) firmly on the pad.
8. Remove covering foil from the slide foil (4).
9. Stick the slide foil on the foam plate by dint of the pins (2) in such a way that all bores in both, the foam plate and the slide foil, do coincide.
10. Take out the pins (2) from drilling.
11. Mount the pad unit (1).

It's also possible to use pad screeding. Pad screeding a material with combined qualities of foam plate and slide foil.

Figure 6 Bonding the pad

4.2 Replace Valves

4.2.1 Replace Blow Air Valve



Warning!

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.

1. Push-in connector (3) and tube (4) pull off from valve (1).
2. Pull off connector (5) from the board.
3. Loosen screws (2) at valve (1).
4. Tighten new valve with screws (2).
5. Push-in connector (3) and tube (4) insert into the valve (1).
6. Connector (5) plug on slot X 4 on the board.

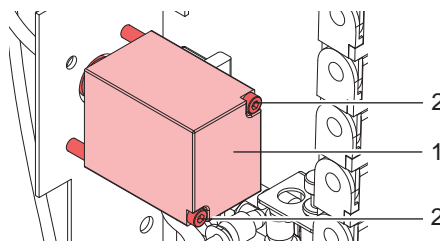
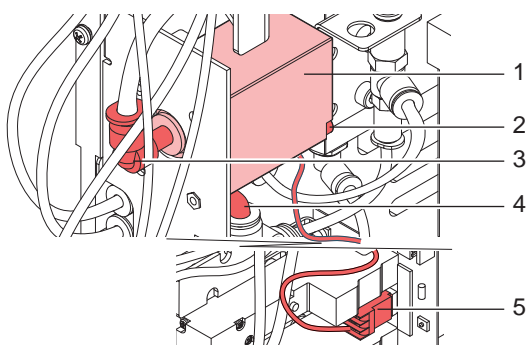


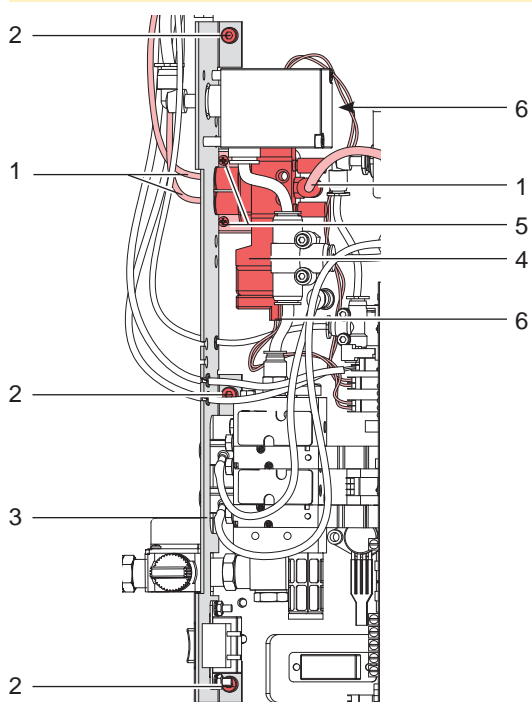
Figure 7 Replace blow air valve

4.2.2 Replace Lift Cylinder Valve



Warning!

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.



1. Extricate tubes (1) out off the push-in connectors of the valve (4).
2. Loosen screws (5).
3. Loosen screws (2) on the bracket (3).
4. After the raising of the bracket (3) the valve can be taken and the it's easy to disconnect the circuit points (6).
5. Remove the valve (4).
6. Connect the circuit points (6) to the new valve.
7. Tighten the screws (5) to fix the valve on the mother plate.
8. Tighten the screws (2) to fix the bracket (3).
9. Put in the tubes (1) into the push-in connectors of the new valve (4).

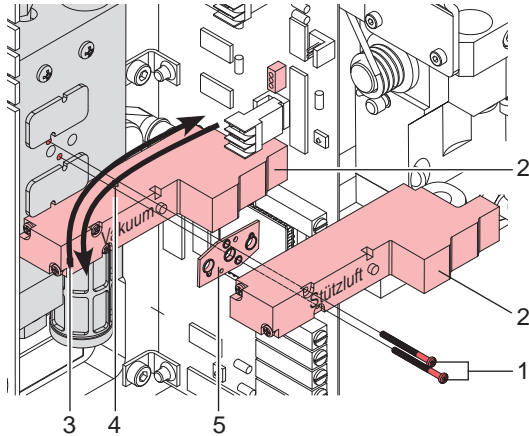
Figure 8 Replace lift cylinder valve

4.2.3 Replace the Valves for Vacuum and Support Air



Warning!

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.



1. Screws (1) loosen of the valve (2) which can be changed.
2. Take off the valve (2) in direction of arrow (4) from the plug connector on the printed circuit board.
3. Put in the screws into the new valve.
4. Provided seal (5) on the new valve (2) present and with the put screws fix.
5. Attach valve (2) on the plug connector on the printed circuit board in direction of arrow (3).
6. Tighten screws (1) at the valve block.

Figure 9 Replace valves on the vale block

4.3 Replace Printed Circuit Board (PCB)



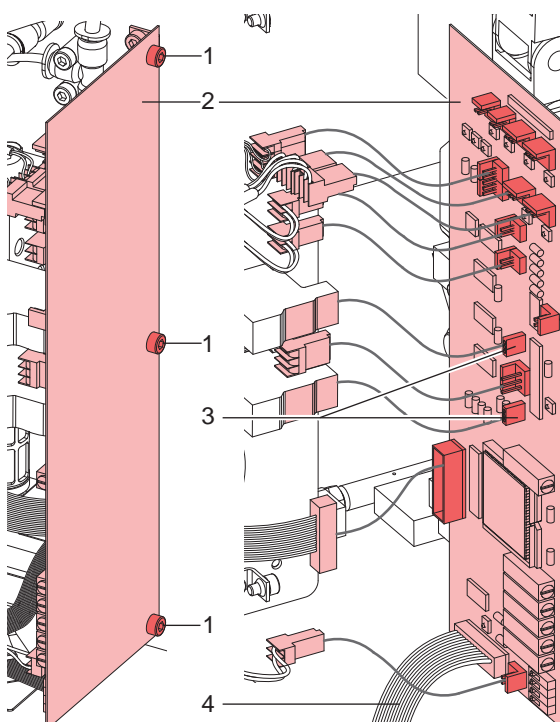
Attention!

Protection against electrostatic discharge before work ➔ grounding



Notice!

After change the PCB it's necessary to adjust the electrical values of the applicator new. Therefor the values of the applicator are to save into the printer. This is described in "Operator's Manual - Universal Applicator with Lift Cylinder 1005", chapter 5.1.3.



1. Loosen screws (1) at the PCB (2).
2. Move the PCB (2) in direction to the cylinder and pad assembly. Disconnect the plug connector (3) on the PCB (2) from the valves.
3. Disconnect all connectors of PCB.
4. Ribbon cable (4) from cable clamp loosen (interface: printer - applicator).
5. PCB change.
6. Reconstitute all connections to the PCB (2).
7. Move the PCB (2) to connect the plug connectors (3) to the valves.
8. Tighten screws (1) to fix the PCB on the brackets.

Figure 10 PCB change

4.4 Replace Controller



Attention!

Protection against electrostatic discharge before work → grounding



Attention!

Remove controller only with a special tool.

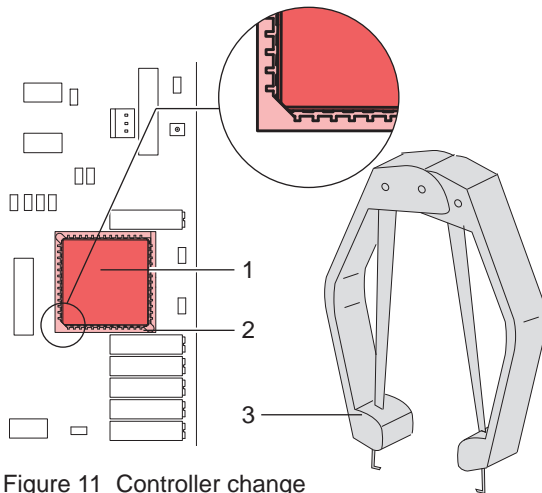


Figure 11 Controller change

1. Dismount the PCB, like described in chapter 4.3.
2. Pull off the controller (1) with a PLCC-extractor (3) from the socket (2).
3. Put in the controller (1). See at the marker on socket and controller.
bevel edge controller → bevel edge socket
4. Mount PCB again, like described in chapter 4.3.

4.5 Replace Cylinder



Warning!

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.

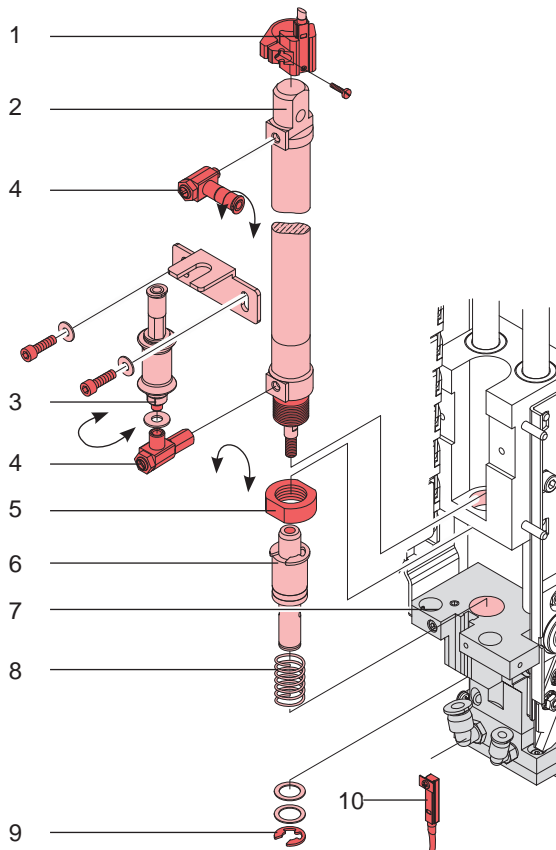


Figure 12 Cylinder change

1. Dismount sensor start position with mounting clip (1), pull off tubes from cylinder (2), unscrew hand slide valve (3) and dismount sensor labeling position.
2. Hand slide valve (3) unscrew.
3. Throttle valves (4) unscrew from cylinder.
4. Remove locking washer (9) and takeout the other both flat washers.
5. Pull the guiding with mounted pad downwards from the adapter bolt (6). Afterwards unscrew the plunger from adapter bolt (6) with combination wrench 5,5 mm. Use the drilling into the adapter bolt (6) to lock it.
6. After loosening the screw nut (5) takeout the cylinder (2).
7. Put in new cylinder (2) and fix it with screw nut (5).
8. Screw the adapter bolt (6) to the plunger.
9. Attach the spring to the adapter bolt (6) and push up the pad assembly. Attach the washers and fix these by the locking washer (9).
10. Mount throttle valve (4) and hand slide valve (3) again.
11. Mount sensors and tubes again.

4.6 Replace Sensors at Cylinder

**Warning!**

Attend that the printer power supply is disconnected and the compressed air supply is closed before starts the mounting works.

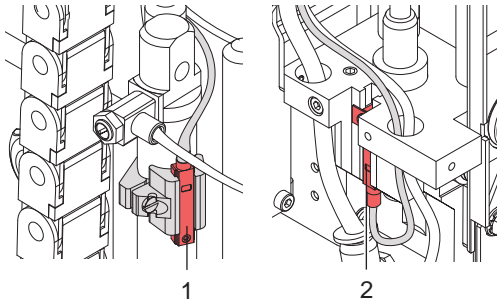


Figure 13 Sensor start position / Sensor labeling position

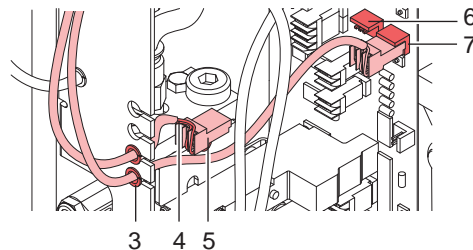


Figure 14 Sensor slots on PCB

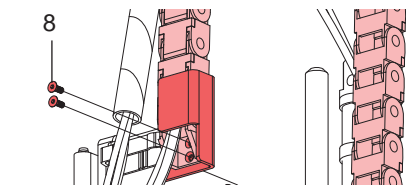


Figure 15 Dismount energy track - Sensor labeling position

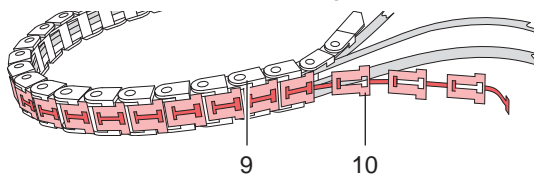


Figure 16 Open the energy track

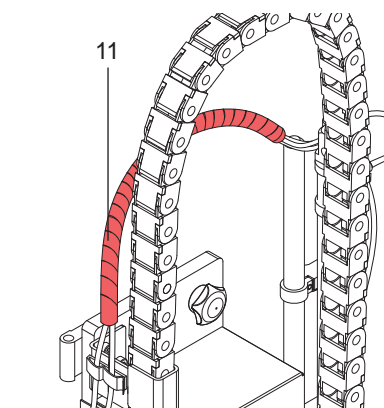


Figure 17 Spiral cable conduit - Sensor start position

1. Dispatch connector (5) of the sensor it will replace and pull the sensor cable up to the bared cables (4) to the plastic bushing (3).
slot X7 (6) → sensor start position (1)
slot X8 (7) → sensor labeling position (2)
2. Remove identification number.
3. Compress the plastic bushing to take out from the bracket with flute. Afterwards pullout the sensor cable.
4. Mount the replaced sensor at the cylinder.

Sensor Labeling Position (2)

- Loosen screws (8) to dismount the energy track on one side only.
- Detach the into one another looked divide in T-form (10) from the divide in U-form (9) of the energy track. (Figure 16)
- Pull out the dismounted sensor.
- Replace the sensor.
- Close the energy track again. Press in the T-form (10) pieces into the U-form (9) pieces.
- Mount the energy track and tighten the screws (8).

Sensor Start Position (1)

- Unwrap cable and tubes from the spiral cable conduit (11) .
- Dismount the sensor 'start position' and replace it .
- Wrap cable and tubes from the spiral cable conduit (11) again.

5. Mounting the sensors on board side in reverse order, like described in paragraph 1 to 4.

After replacing a sensor it's necessary to adjust the sensor position new. Described in chapter 5.1.

5.1 Sensor Labeling Position / Sensor Start Position

The sensor labeling position (7) receipted the achievement the labeling position of the pad.

In case of function the LED 5 (3) on PCB will glow. An advanced functional check is possible with a measurement on X8 (2), PIN 1 (squared capillary joint). The voltage in case of function must be $U_{\text{function}} > 3,1 \text{ V}$.

Sensor start position (6) receipted the achievement the start position of the pad. It means the label takeover position between printer and applicator.

In case of function the LED 4 (4) on PCB will glow. An advanced functional check is possible with a measurement on X7 (1), PIN 1 (squared capillary joint). The voltage in case of function must be $U_{\text{function}} > 3,1 \text{ V}$.

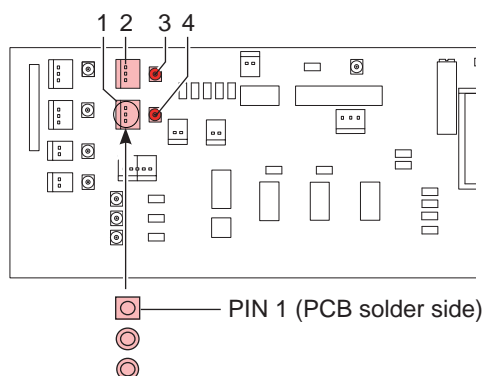


Figure 18 Reading points of sensors

Sensor Function Test Manually

1. Printer switch on.
2. Compressed air supply close.
3. De-aerate the cylinder with the hand slide valve.
4. Pull down the pad (cylinder extended) → Sensors start position (6) deactivated
5. Press the pad in the maximum high position. (cylinder retracted) → Sensor start position (6) activated
6. Pull down the pad and press the adapter bolt (8) into the pad assembly. (▷ Figure 19 right) → Sensor labeling position (7) activated
7. Let go the adaptor bolt (8) that it is pressed by feather-by virtue of back → Sensor labeling position (7) deactivated

Adjustment Sensor Start Position

1. Compressed air supply open.
2. Printer switch on → cylinder will be retracted (start position)
3. Push sensor start position (6) in the sensor initiate position. The achievement of this position by the lights of the LED 4 (4) indicated
4. Fix the position of the sensor via tighten the ring (5).

Adjustment Labeling Position

1. Printer switch on
2. Adjust the sensor position so that the pushed in adapter bolt be approx. 5 mm into the pad assembly.

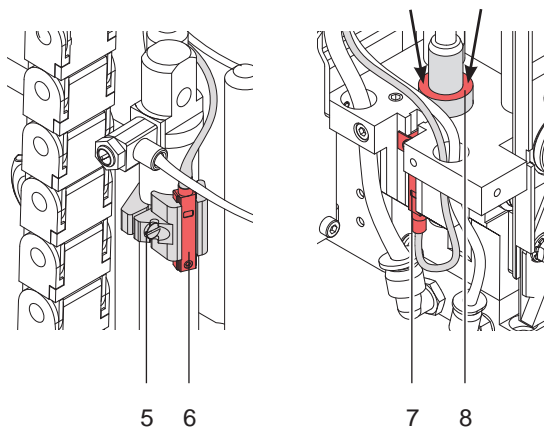


Figure 19 Sensor start position /
Sensor labeling position

5.2 Pressure Measurement

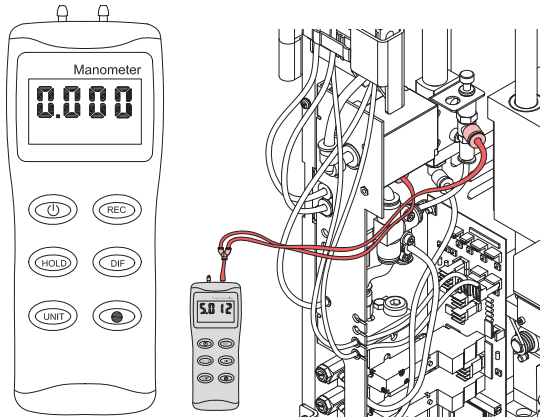


Figure 20 Pressure measurement

Use a manometer with a measurement area to 7 bar for measurement the pressure which described in the pneumatic drawing.

In Figure 20 you can see the measurement of pressure for the lift cylinder. Seems like the measurements for support air and vacuum.

Reading points (RP) of pressure values, described in pneumatic drawing.

RP 1 : Working Pressure Lift Cylinder (reference value 5,0 bar)

1. Dismount cover, compressed air supply close and de-aerate the cylinder with the hand slide valve afterwards.
2. Attach manometer between measurement points RP1.
3. Compressed air supply open and measure the pressure.
4. As and when required adjust it on miniature pressure regulator (3).
5. To detach the manometer close the air supply and de-aerate the cylinder again.
6. Mount cover again.

RP 2 : Support Air (reference value 2,0 bar)

1. Dismount cover.
2. Attach manometer between measurement points RP2.
3. Open the air supply and activate the valve manually to measure the pressure.
4. As and when required adjust it on support air throttle valve.
5. Mount cover again.

RP 3 : Vacuum (reference value -0,6 bar)

1. Close suction plate hermetic.
2. Attach manometer between measurement points RP3.
3. Open the air supply and activate the valve manually to measure the pressure.
4. As and when required adjust it on vacuum throttle valve.

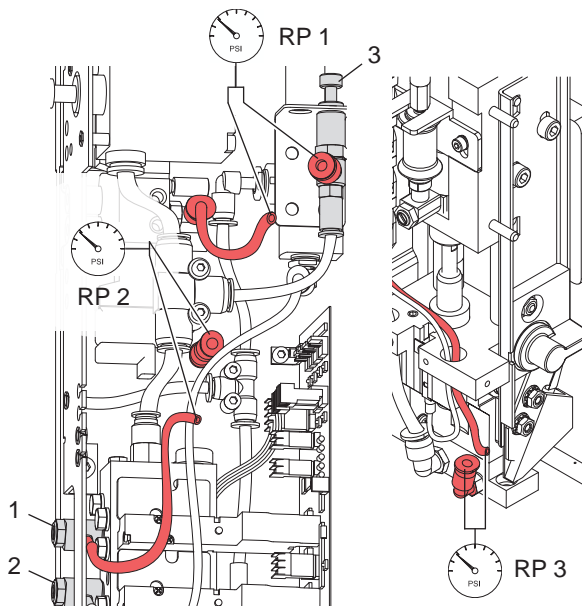


Figure 21 Reading points to measure the pressure



Attention!

After pressure measurements, connect all component exactly and check it.

5.3 Check the Vacuum / Sensor Vacuum

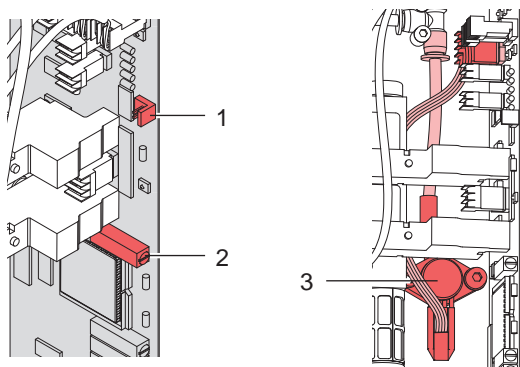


Figure 22 Check the vacuum via reference voltage

1. Open the air supply and switch on the printer.
2. Measure the voltage on PCB port X14 (1).
Reference voltage : 1,00 - 1,05 V
3. As and when required adjust it on potentiometer R11 (2).
4. Close suction plate hermetic and activate the vacuum valve manually to measure the voltage again on port X14 (1).
Reference voltage in case of a vacuum: > 3V

$U_{\text{Vacuum}} > 3V \rightarrow$ accurate function

$1,05 V < U_{\text{Vacuum}} < 3V \rightarrow$ leakage in the chain of vacuum or failure of the sensor vacuum (3)

Replace the sensor vacuum (3) or eliminate the leakage.

The following table comprised possible sources of faults and possible proposals for fault clearance. Outer causes like lack of pressure air and malfunction of printer will be verified further.

Symptom	Cause and solution
Insufficient vacuum on pad	<ol style="list-style-type: none"> 1. In cyclical operation, the vacuum valve won't controlled. PCB defect ► change PCB 2. There is no pressure at the outlet of the vacuum throttle valve or the pressure can't be controlled. ► Replace vacuum throttle valve. 3. It doesn't establish a vacuum on exit of the vacuum generator ► Replace the sound absorber if it soiled. 4. Leakage in the chain of vacuum ► Measurement like described in ▷5.4 ► Check the vacuum transmission elements and in case of failure replace it. 5. It doesn't establish a vacuum on exit of the vacuum generator ► Replace the vacuum generator in case of failure. 6. Not enough negative pressure at the suction plate. Suction channels at the suction plate, foil or absorbability plate clogged. ► Clean the suction channels and/or replace foil and absorbability plate respectively.
Fault in cylinder movement	<p>The state of valve control will shown via LED's at the plug connectors.</p> <ol style="list-style-type: none"> 1. Cylinder will be not controlled. LED's glow in case of switching but valve doesn't work ► Replace valve 2. LED's doesn't glow ► Check connections, replace as necessary PCB 3. There is no pressure at the outlet of each on cylinder mounted throttle valve or the pressure can't be controlled. ► Replace the fault throttle valve. 4. There is no pressure at the outlet of the miniature pressure regulator or the pressure can't be controlled. ► Replace the miniature pressure regulator.
Loss of blow air	<ol style="list-style-type: none"> 1. The valve doesn't activated, LED at valve doesn't glow. PCB damaged ► Replace PCB 2. On pad doesn't exist enough pressure in case of activated valve. Pneumatic tubes fault ► Replace pneumatic tubes 3. Valve inoperable ► Check with 24V and replace it in case of damage
Loss of support air	<ol style="list-style-type: none"> 1. Valve will not controlled, LED doesn't glow. (▷ Operator's Manual) - PCB damaged ► Replace PCB 2. There is no pressure at the outlet of the support air throttle valve or the pressure can't be controlled. ► Replace support air throttle valve. 3. Not enough pressure air at blow tube in case of controlled valve. Pneumatic tubes fault ► Replace pneumatic tubes

Table 4 Troubleshooting and fault clearance

Symptom	Cause and solution
Permanent error in transfer of labels to the pad (error message: pad empty)	<ol style="list-style-type: none"> 1. Incorrect pad position in the start position compared to the printer's dispense edge. Backmost edge of pad approx. 1 mm over the printer's dispense edge. (▷ Operator's manual) 2. Temporary falling pressure in compressed air supply for the lift cylinder. (e.g. trough manipulate hand slide valves) ▶ Quit the error message 3. Vacuum too low and want of Vacuum at pad ▶ Adjust vacuum throttle valve. 4. Support air doesn't blow exactly the label to the pad. ▶ Adjust the blow tube for support air. ▶ Adjust pressure of support air via throttle valve 'support air'. ▶ Adjust switch on delay at via potentiometer R21 ▷Operator's manual
Loss of applicator function	<ol style="list-style-type: none"> 1. Interface applicator-printer connector SUB-D15 doesn't connect accurate. ▶ Reestablish connection. 2. Breakdown pressure air. ▶ Check circuit points. 3. Applicator PCB damaged. ▶ Replace PCB.

Table 4 Troubleshooting and fault clearance (continuance)

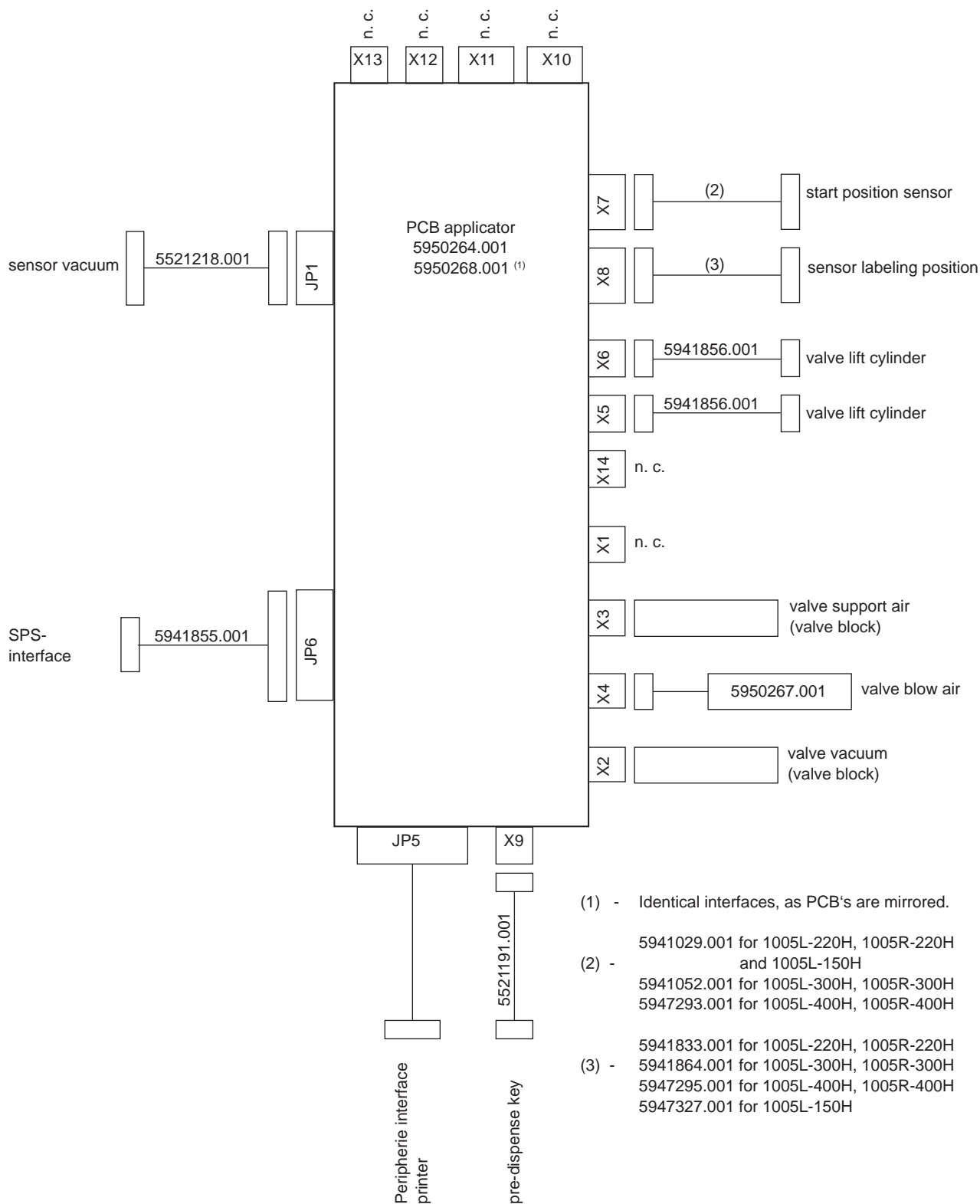


Figure 23 Block diagram applicator 1005

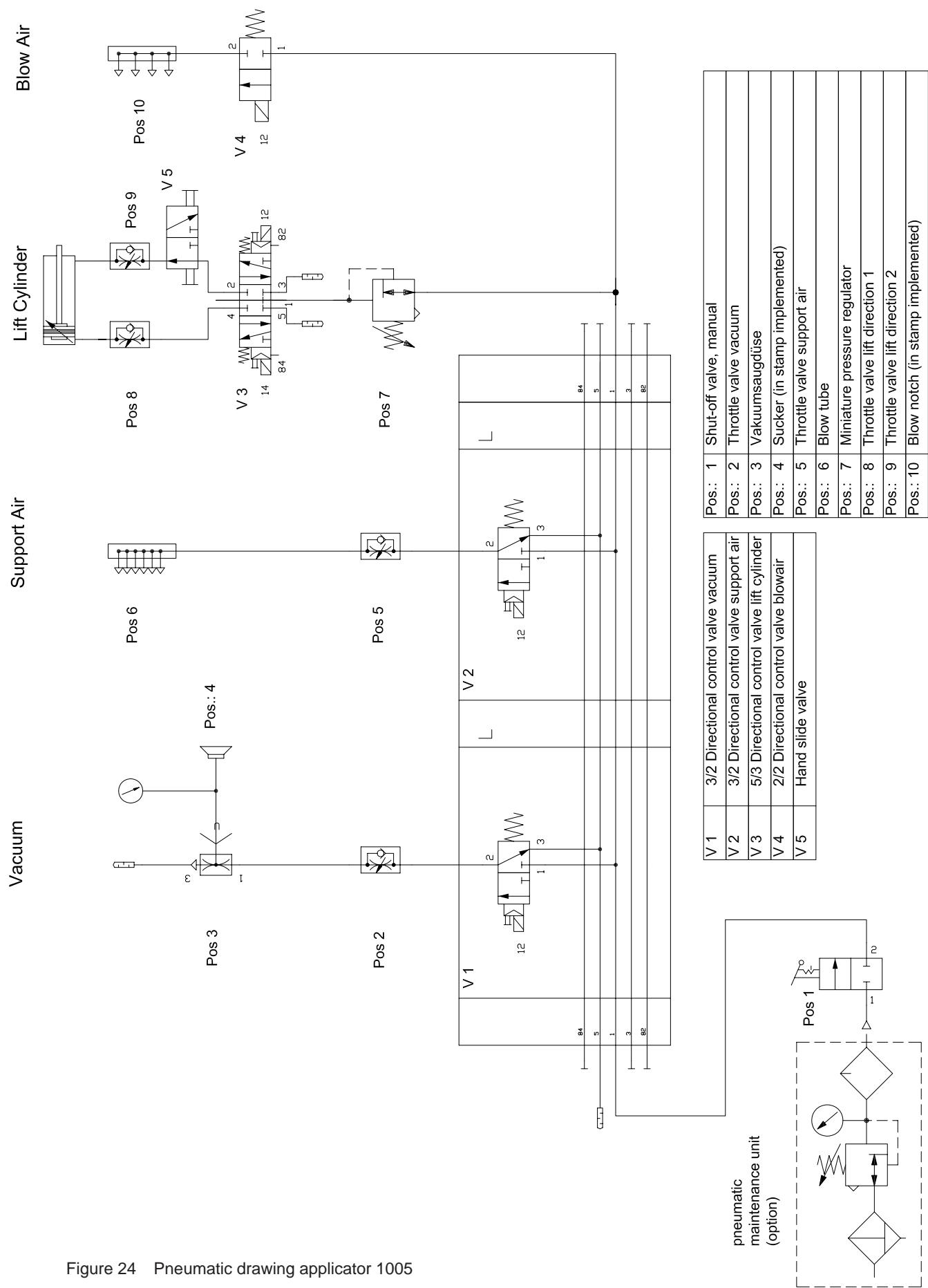


Figure 24 Pneumatic drawing applicator 1005

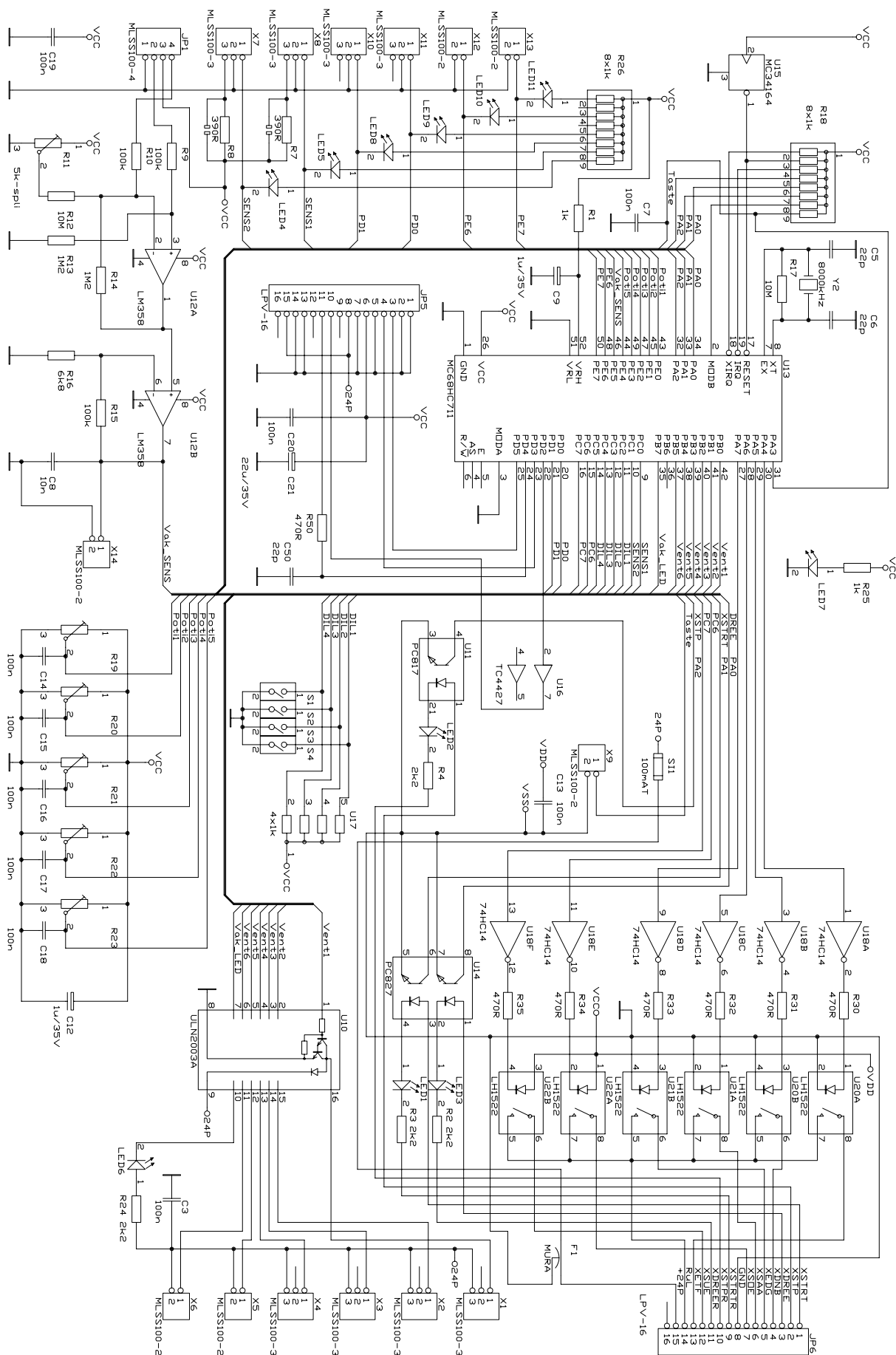


Figure 25 Circuit diagram PCB applicator 1005

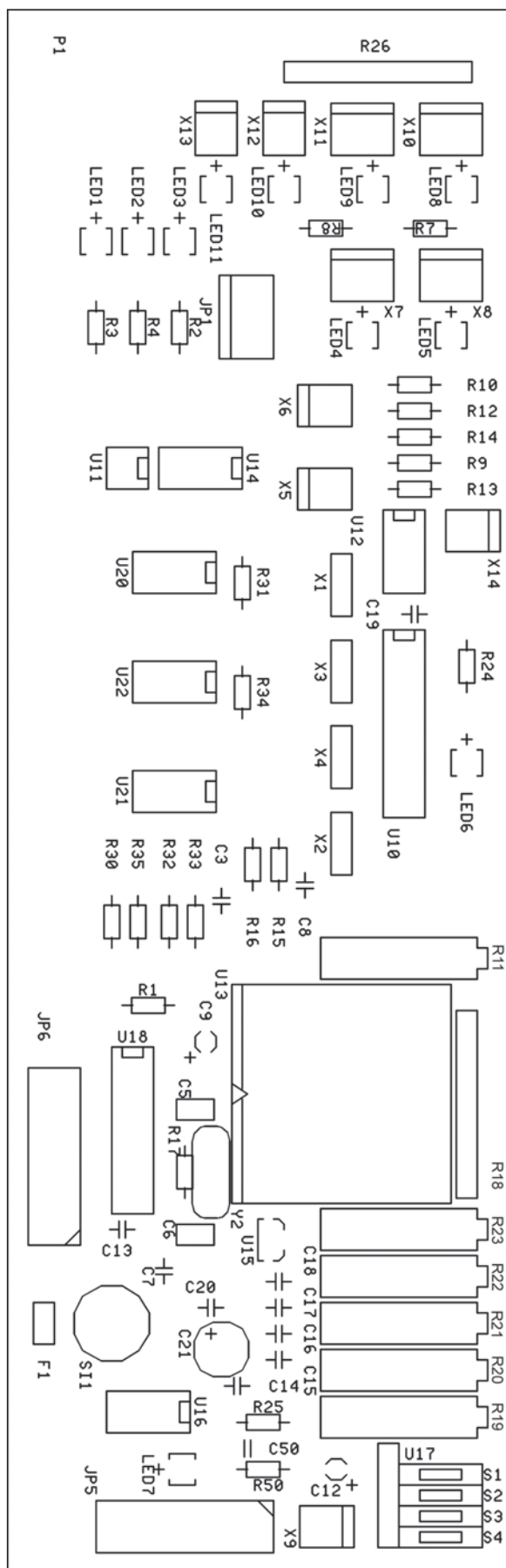


Figure 26 Terminal diagram PCB 5950264.001

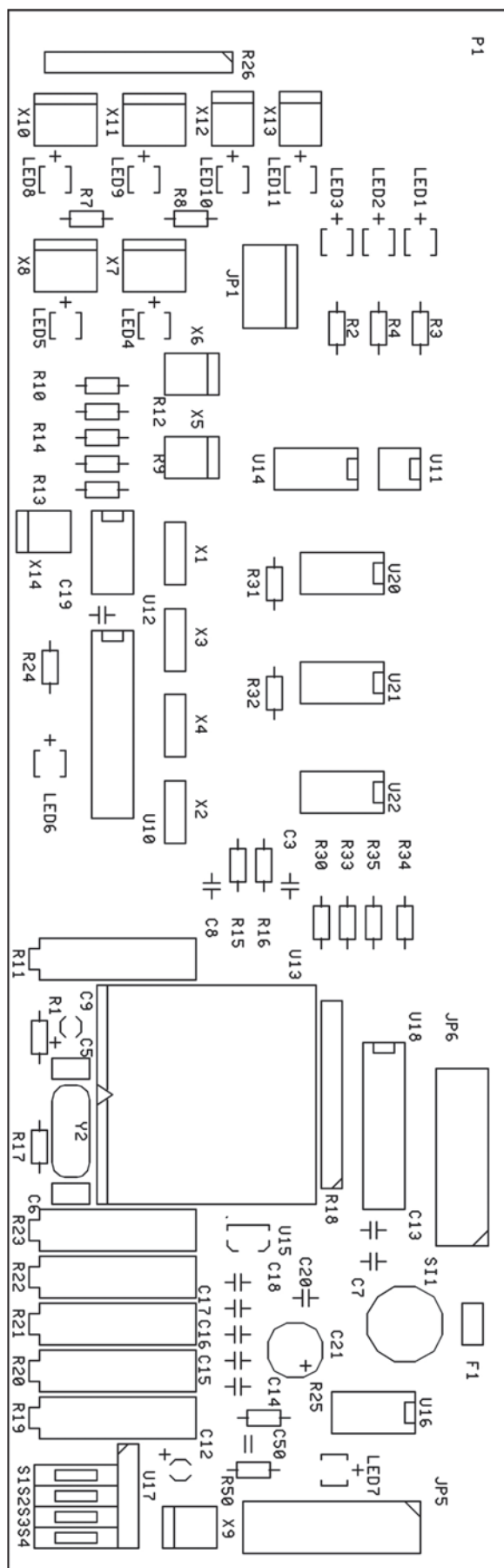


Figure 27 Terminal diagram PCB 5950268.001

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