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WARNING

To take more advantage of your printer, recommended to study the contents of this leaflet carefully.

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Preface

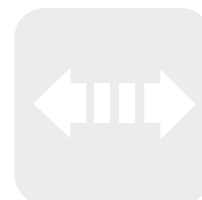
Characteristics of Printer Model SP-1400

Dear customer

The silk screen printing machine model SP1400 has been designed and manufactured with flat & round printability.

All operations are precisely controlled by control panel and a digital display, LCD .

- 1 To get the best quality result, all the moulding process is done by using aluminium mold which has light weight.
- 2 Having the best imported pneumatic system (connectors-solenoid valves- cylinders etc....) for more durability & stability.
- 3 The main jack includes a guide for longer life of cylinder and print accuracy.
- 4 Quick alteration printing system from round to flat and vice versa .
- 5 Equipped with electric board of micro controller of soft ware and easy operation and reliable hard ware for common noises .
- 6 Having reliable soft ware giving operator to access information in different languages such as 1. English 2.Persian 3. Arabic 4.Turkish 5. Russian



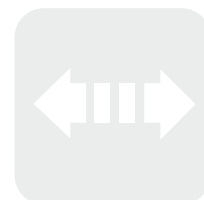
Thanks to the full trust and reliance of our customers on the quality of our products.

Note:

- 1- Compressor should be kept more than 5 meters away from printer.
- 2- Use separate socket for compressor and printer.
- 3- If your working place is located in the area with periodic current , it is recommended to use a voltage stabilizer
- 4- Do not keep printer near to three-phase unit or noise maker
- 5- Connect your printer to an earth wire or to ground or to the nearest cold water pipe
- 6- The recommended standard pressure is 6 bar.
- 7- Try to discharge the water stored in the compressor weekly.



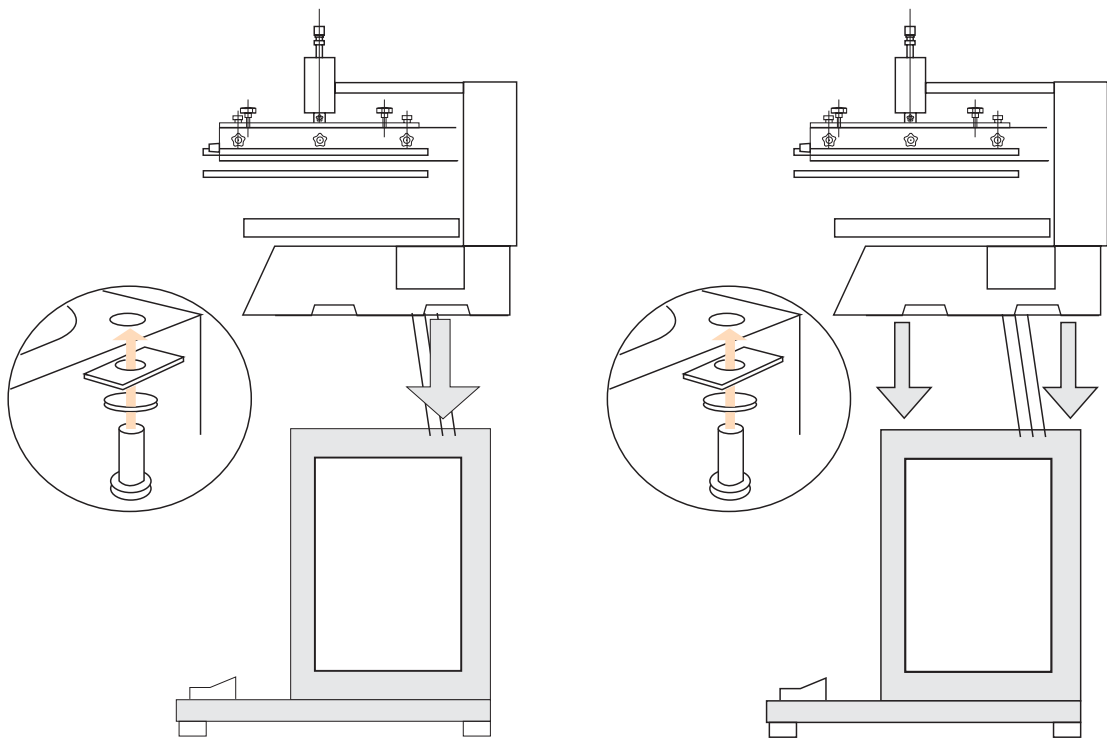
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2

Mechanical installation

Please put the main body over its stand and fix them by 4 pcs. bolt no. M-12



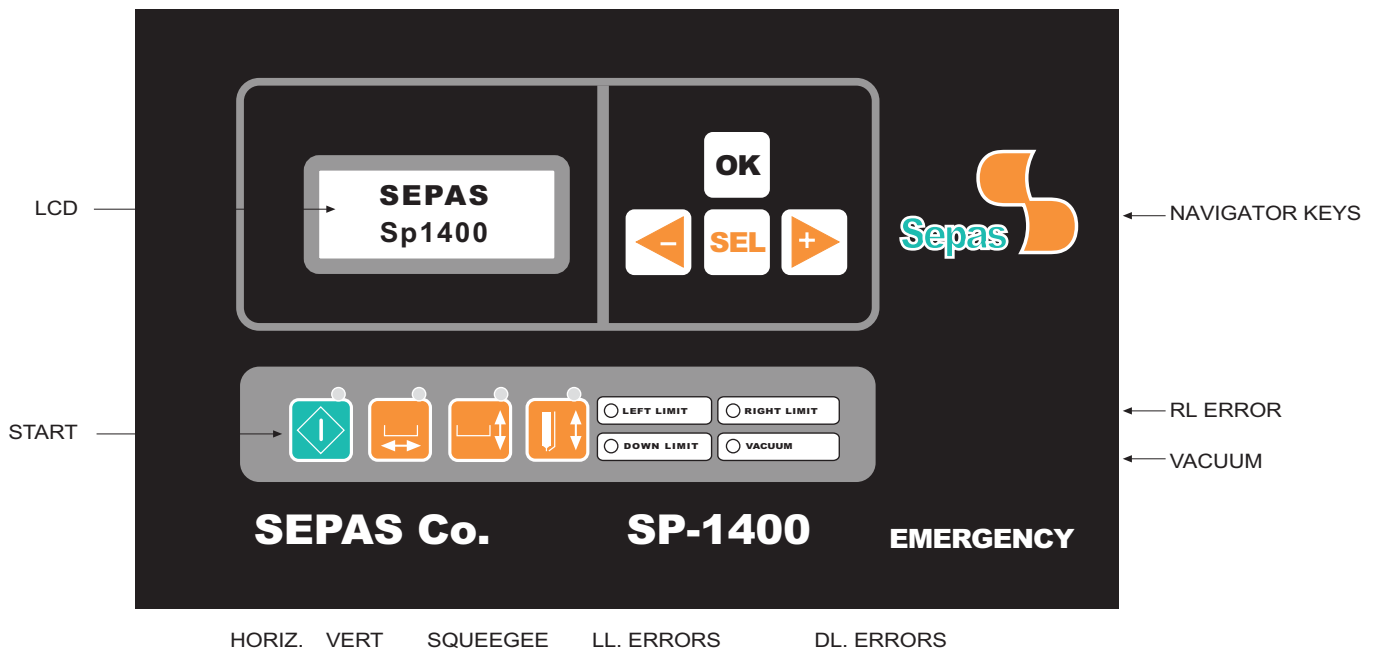
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Operator's panel

Operator's panel includes the following parts :

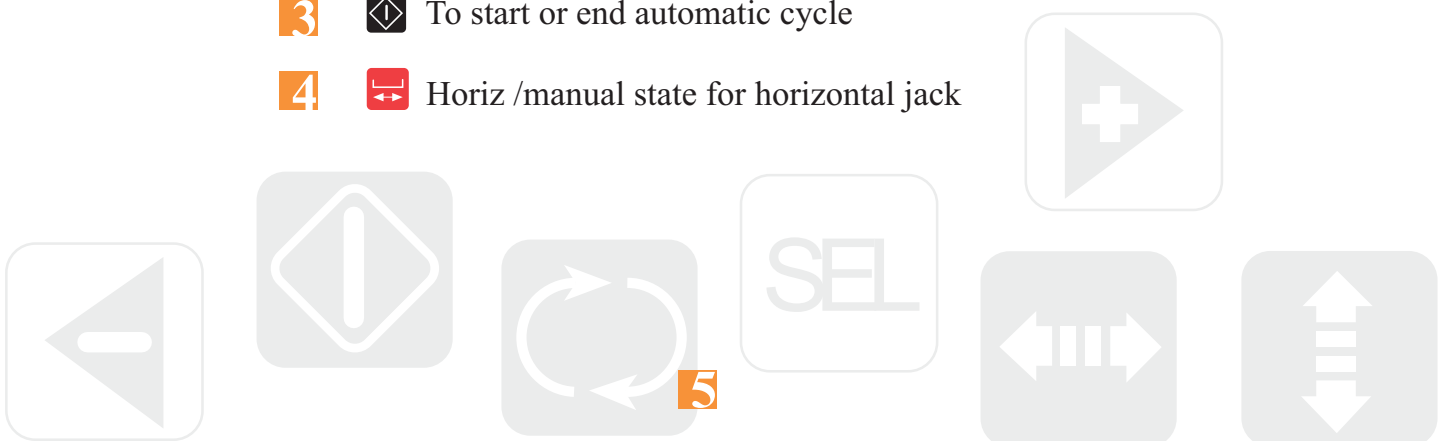


1 LCD:Display screen



2 Navigators keys  &  &  &  are for changing parameters and operation type

3  To start or end automatic cycle

4  Horiz /manual state for horizontal jack



5

- 5  Vert/manual state for vertical jack
- 6  Squeegee : up/down in manual operation to clean ink
- 7 LL Error : Error of left limit
- 8 DL Error : Error of down limit
- 9 RL Error : Error of right limit
- 10 Vacuum: shows activities of the vacuum pump




4

Installation

Each time you turn on your printer, the control system returns to set up position and you can see LCD with flashing light.

Lcd
Sepas Co.
SP1400
Flat Round

Note: Now you can select round or flat print by pressing  & 

We can enter from set up to main menu by pressing  which gives operator the following information as detailed bellow:

First Line: print type (flat or round)


Second Line: operation type (automatic-mono cycle-ink cleaner)

Third Line: counter. For detailed information please press  :



- a) **First line:** print type
- b) **Second line:** counter (unchangeable)
- c) **Third line:** parameters
- d) **Forth line:** remaining parameters

Lcd
Flat
Automatic
counter

Lcd
Flat
counter
parameters
remaining

Note : Now by repressing  you will return to the main menu.

Operation can be changed by selecting three optional states if pressing

 or 



1 Automatic state

you can continue printing by pressing  and it will stop if pressing .

Therefore, it will stop at the end of cycle and will return to the first state. In this case, pedal will operate in two ways :

2

a) If we press pedal at the beginning of cycle, it operates the same as .

b) If we press pedal while operating, it returns to the Reset position.




Mono cycle

3

Each time you press pedal, a complete cycle will be performed and it will stop at the end of cycle.

squeegee

Each time you press pedal, the ink cleaner (squeegee) will come down to clean extra ink of frame and will return up thereafter.





Note: when we are in the main menu, we can use the manual option too. In other words, by each time pressing  &  &  , you can experience the horizontal-vertical jack and squeegee

Now in nonstop pressing position above performance will be done speedily.






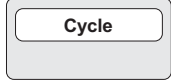
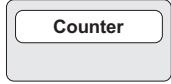
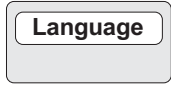



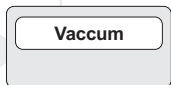
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Parameters Adjusting

Pad Printer SP 1400 has several parameters with different operations. You can easily select them by pressing Navigator keys or  &  &  & .





These parameters are as detailed bellow :

By pressing  you enter to the first page of parameters. By pressing  & , following parameters will be performed separately.

- | | | | |
|----------|---|---|---|
| 1 | CYCLE: It is print record per each automatic cycle. Counter returns to zero state at the end of each cycle. |  | 1 |
| 2 | COUNTER: Indicates print record |  | 2 |
| 3 | LANGUAGE: Available language : 0: English
1: Persian 2: Arabic 3: Turkish 4: Russian |  | 3 |
| 4 | AFTER PRINT: Stop time/second/after print |  | 4 |
| 5 | RIGHT TIME: Stop time/second/right horizontal jack |  | 5 |
| 6 | LEFT TIME: Stop time/second/left horizontal jack |  | 6 |
| 7 | VACUUM:
0 - Vacuum is inactive 1 - vacuum is active |  | 7 |






Adjusting the parameters:

To adjust parameters: we press **SEL** to enter into the parameters menu. By pressing  &  we select our parameter and **OK** shows the no. of the parameter which can be decreased or increased by pressing  &  and finally, we can save it by **OK**. You can exit from parameters menu and return to the main menu by pressing system control key

Note: if something happens in error you can keep pressing **SEL** for some second to return to setup position.

Password: To prevent unauthorized utilization we can give a password protection to our unit by selecting 4 digital no.

How to make a password: when your printer is off, while pressing **OK**, you turn on your system. Picture no.1 is now on your display. If you repress **OK**, picture no.2 will come. Now you can select nos. (from 0-9) by pressing  &  and you can go to the next no. by pressing .

Then you confirm your password (4 digits) by pressing **OK** which will direct you to set up menu and by repeating password you can start printing.

Note

If you do not want any password, while your printer is off you hold **OK** and turn on your printer and enter your previous no. on picture no.3 and press **OK** to entering into picture no.4. Now you just press **OK**.

Figure 1

Enter Current
Password:0000

Enter New
Password:0000

Figure 2

Figure 3

Enter Current
Password:0000


Enter New
Password:0000

Figure 4



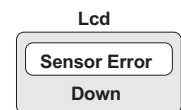
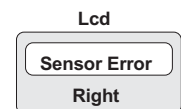
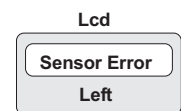
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Errors

If encountering errors or difficulties, your printer stops for a while and you can see the error type on your display together with a red LED with flashing light. In this case if you hold  for some seconds your system will return to set up position.

List of errors:

- 1 Left sensor:** it is left micro switch or horizontal cylinder or solenoid valve.
- 2 Right sensor:** it is right micro switch or horizontal cylinder or solenoid valve.
- 3 down sensor:** it is down micro switch or vertical cylinder or solenoid valve.
- 4 up sensor:** if your system does not move upside or any electric connection for down micro switch it is the error of up sensor .



Memory error :

If you notice the following errors on your display, please contact the manufacturer.

CALL SERVICE ■ DATA ERROR 4 ■ DATA ERROR 0 ■ PASSWORDS

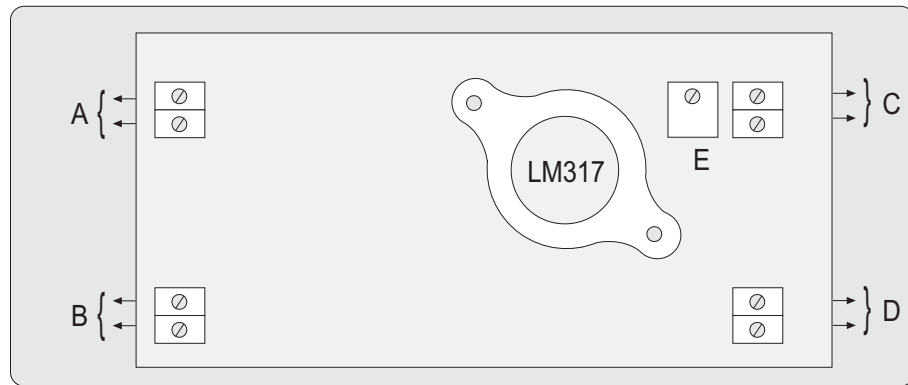
Note: To remove errors no. 1,2,3 please refer to page ... & ...



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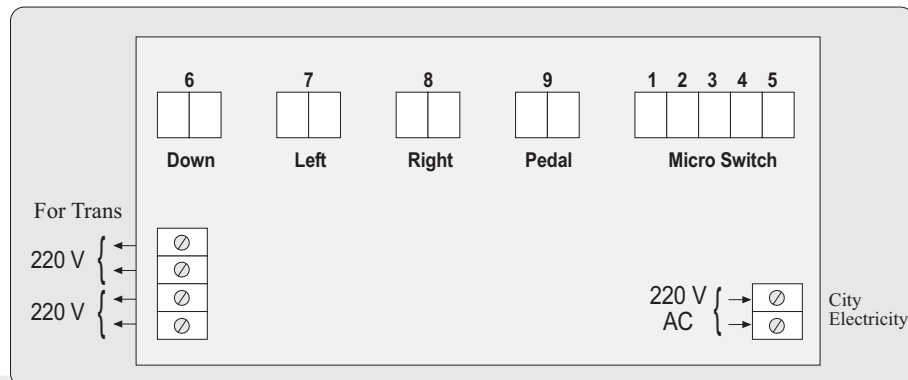
Mother Board / Micro-switch Board / Filter Board

Figure a)
Electric filter board



- A)** Output from transformer – black wire 12V AC
- B)** Output from transformer – brown wire 20V AC
- C)** Output to connect to the black wire of board which is connected to mother board/CPU
- D)** Output to connect to the orange wire of board which is connected to mother board/IO
- E)** Potentiometer for adjusting CPU /voltage from 9V to12V which is for LCD too

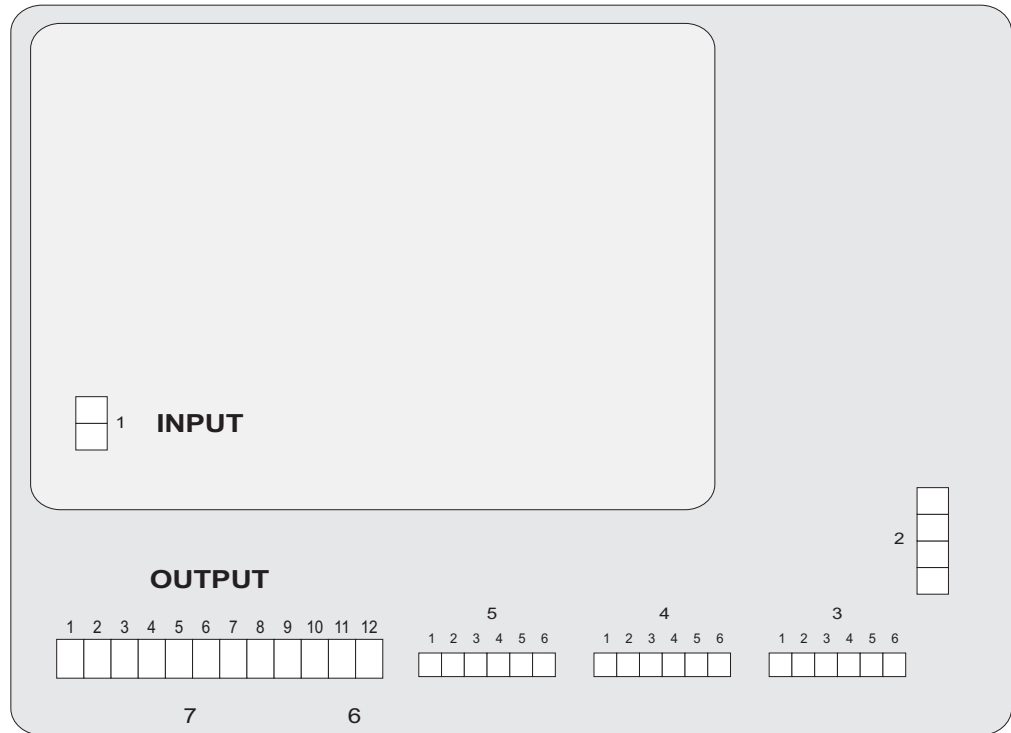
Figure b)
Micro switch board



5 pin socket: no.1: common no.2: pedal no.3: right micro switch no.4: left micro switch no.5: down micro switch

2 pin power socket: no.6: down micro switch no.7: left micro-switch no.8: right micro switch.

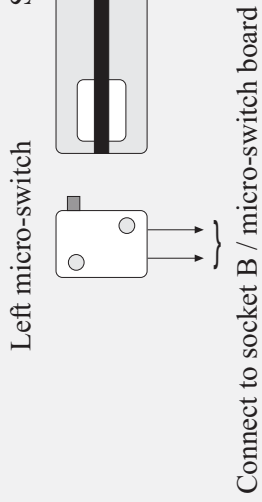
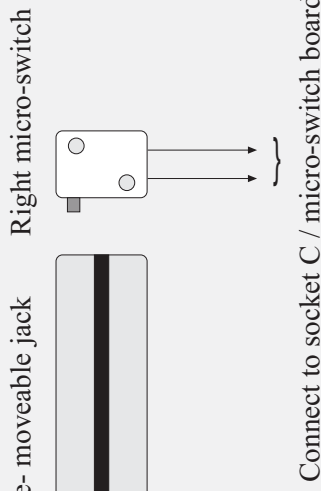
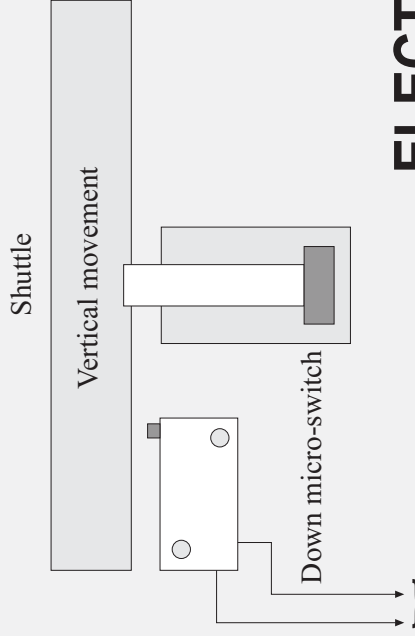
Figure g)
Mother board



- 7** (1) Green terminal as adjusted voltage input with black wire
- 8** Socket nos: 2-3-4 : unutilized
- 9** (5): INPUT
- 10** No.1: common no.2: down micro switch no.3: left micro switch no.4: right micro switch no.5: pedal no.6: void
- 11** (6) : INPUT
- 12** 2 pin green terminal as adjusted voltage input with orange wire
- 13** (7) 10 Pin green terminal:
OUTPUT:
1- black common
2- brown shuttle/up &down vertical movement
3- red shuttle/right & left horizontal movement
4- orange ink cleaner
5- yellow vacuum

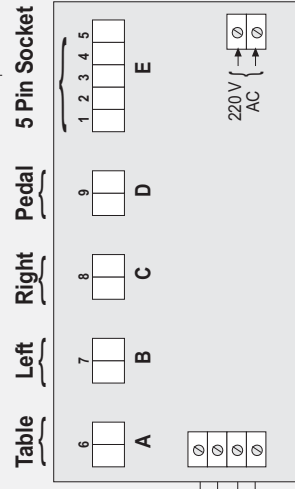


ELECTRIC CIRCUIT SP-1400



More about electric circuit

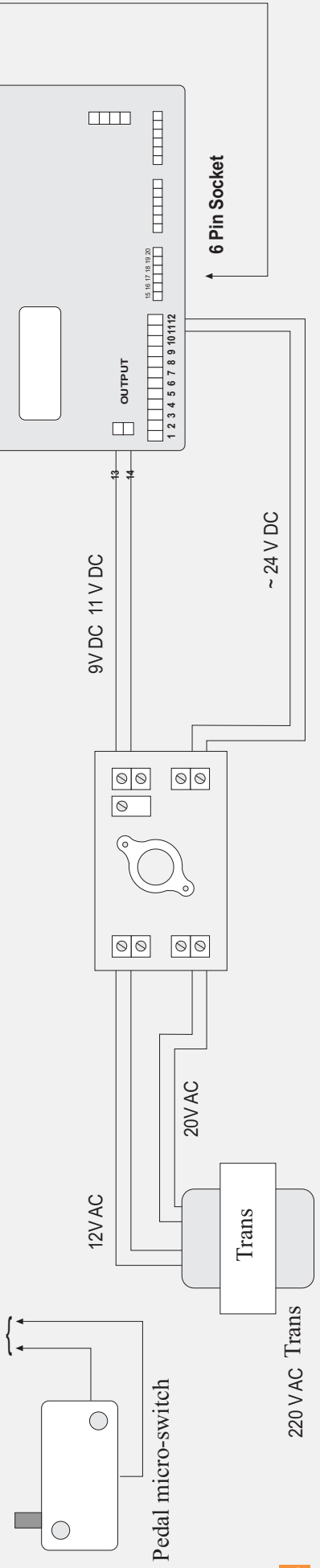
- A) Input**
 Nos. 11-12 Input 24 v DC
 Nos. 13-14 Input 9v-1 lv DC
 No. 15 Common
 No. 16 Down micro-switch
 No. 17 Left micro-switch
 No. 18 Right micro-switch
 No. 19 Pedal micro-switch
 No. 20 Void
- A) Output (Solenoid Valve)**
 No. 1 Common
 No. 2 Vertical movement (up & down)
 No. 3 Horizontal movement (right & left)
 No. 4 Ink cleaner
 No. 5 For Vacuum system
 Nos. 7-8-9 Void



city electricity

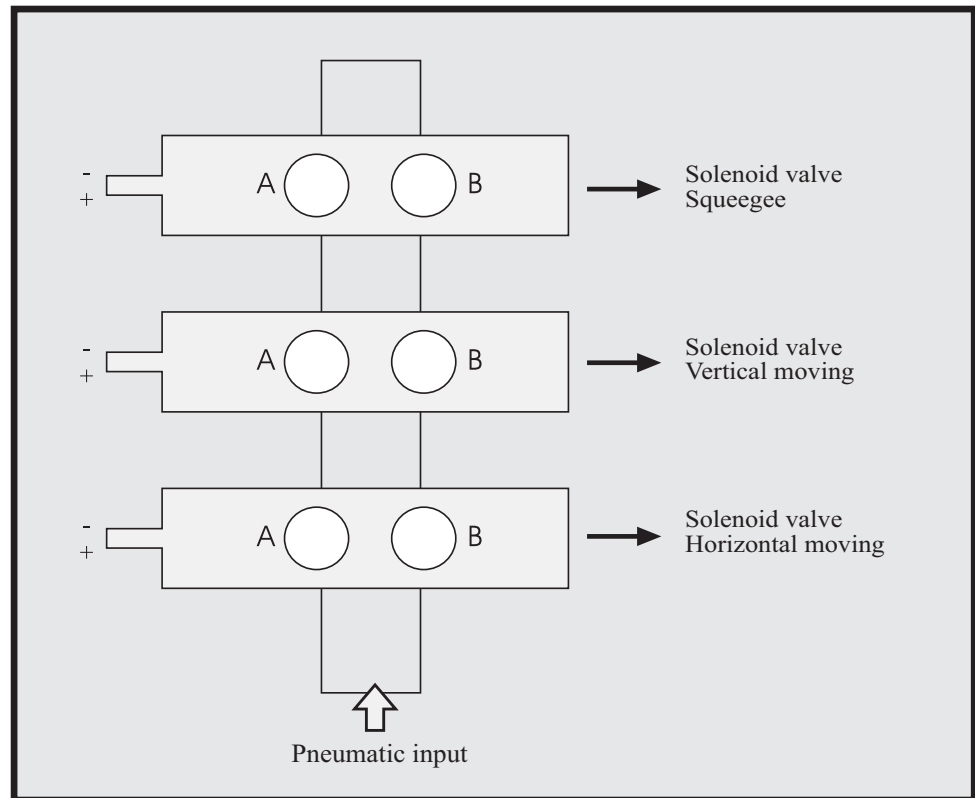
Micro-switch Board

Connect to socket D / micro-switch board



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The aspect of solenoid valve block and pneumatic circuit

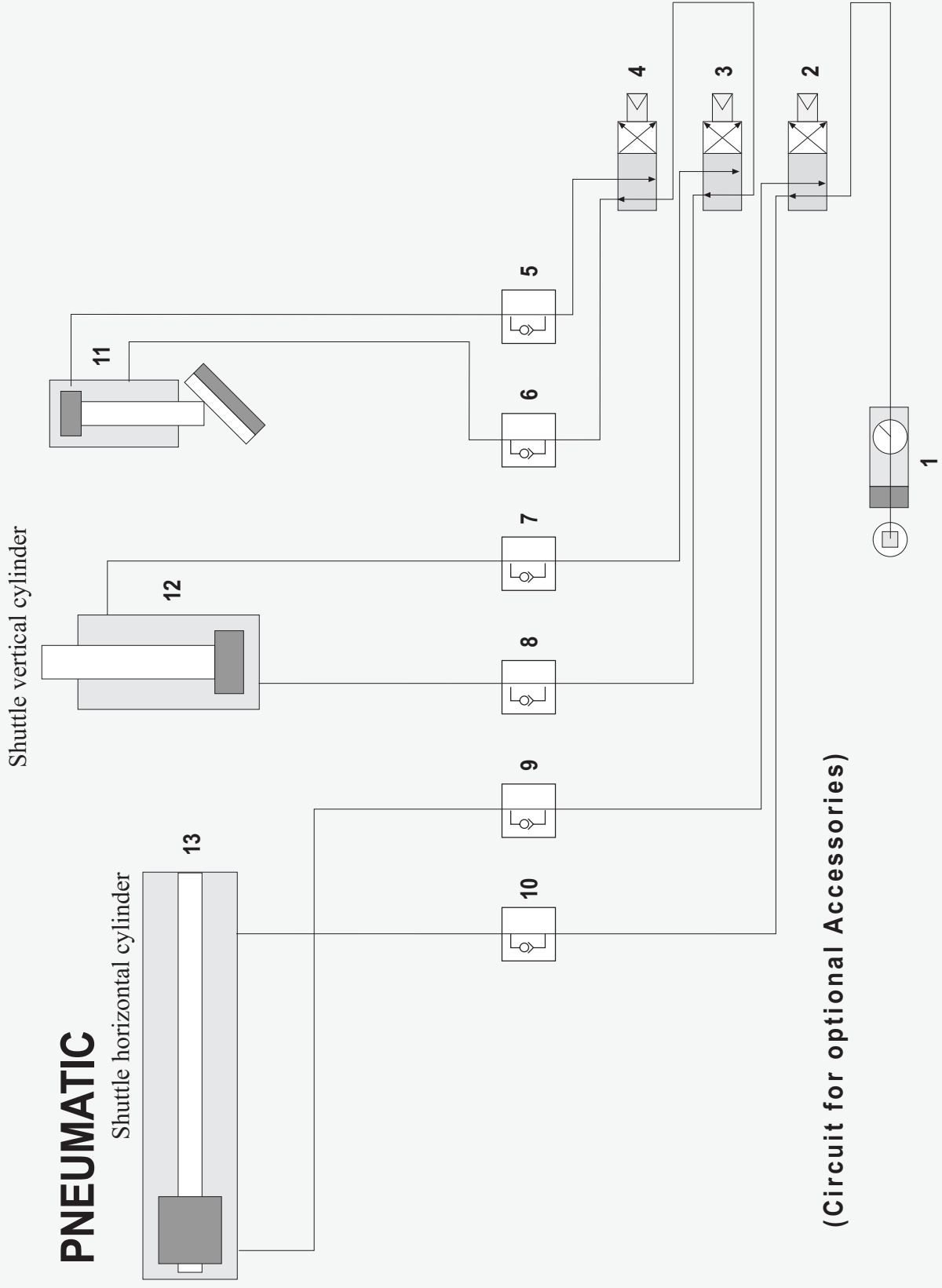


When you open the back door of your system: from up-down

- 1 First solenoid valve for squeegee
- 2 Second solenoid valve for jack/vertical movement
- 3 Third solenoid valve for main jack/horizontal movement



PNEUMATIC



(Circuit for optional Accessories)

More about pneumatic circuit

- 1 Pressure regulator
- 2 Single bobbin solenoid valve /shuttle right & left horizontal movement
- 3 Single bobbin solenoid valve/shuttle up & down vertical movement
- 4 Single bobbin solenoid valve/squeegee movement
- 5 Flow control valve(squeegee /down)
- 6 Flow control valve (squeegee/up)
- 7 Flow control valve (shuttle/up)
- 8 Flow control valve (shuttle/down)
- 9 Flow control valve (shuttle –jack / right)
- 10 Flow control valve (shuttle-jack/left)
- 11 Squeegee/cylinder
- 12 Vertical cylinder
- 13 Shuttle/horizontal cylinder

Note:

If your system is connected to air please make the following arrangement for cylinders and jacks(normal case) :

- 1- Squeegee-jack /up
- 2- Vertical jack/up
- 3- Horizontal jack/left

